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ABSTRACT

The status of the Japan Broadcasting Corporation (NHK) for the year 1973 is presented in this report. Organized by the public relations department of this public corporation, this report is similar in format to a conventional corporate annual report, with the exception of financial data. The report constructs a profile of NHK including management programing, facilities, research programs, and overseas operation. Statistics on the entire radio and television operation are presented as is a brief history of NHK. (MC)

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This picture is titled "Nanzenji Sanmon". It is a sketch of the gate of Nanzenji in Kyoto, and blooming cherry blossoms. The creator of this wood block print, Fumio Kitaoka, was born in Tokyo in 1918. He was invited by the Soviet-Japan Society to give a one-man show at the Orient Nations Museum in Moscow in 1971. His works are now on display at the Museum of Modern Art in New York, the Boston Museum, the Warsaw Museum, etc.

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PROFILE OF NHK

Nippon Hoso Kyokai (NHK, Japan Broadcasting Corporation) was established in 1925 to inaugurate radio broadcasting in Japan. It introduced TV broadcasting in 1953. Currently NHK has five domestic broadcasting networks consisting of two radio, one FM and two television networks, over which it conducts a total of 91.5 hours of broadcasting a day.

Broadcasting in Japan is carried out under a dual system. It is conducted by NHK, the only public service broadcasting organization under the Broadcast Law enacted in 1950, and by private commercial broadcasting stations. NHK is financed entirely with receiver's fees paid by TV set owners. It does not depend on government financial aid or on any specific capital, and it is forbidden by law to engage in commercial advertising. It is a sort of "people's broadcasting organization" in which everybody has made an investment. Commercial broadcasting stations, by contrast, depend for their income on advertising revenue.

As a public service broadcasting organization, NHK must make sure that its programs can be received in all parts of the nation. To ensure uniform service, it operates 3,245 transmitting stations for TV, 317 for radio, and 388 for FM across the nation as of January 1, 1973.

In addition to broadcasting programs, NHK tries to reflect the views of its audience in its programs. It also tries to provide a high-quality listening-and-viewing environment, and to protect and promote enhancement of Japanese culture.

NHK's broadcasting activities extend overseas. Radio Japan conducts a total of 37 hours of overseas broadcasts a day in 23 languages. NHK is also a member of the ABU (Asian Broadcasting Union) and the EBU (European Broadcasting Union). In addition to cooperating with various activities of the organizations, it accepts personnel from overseas broadcasting stations for training in program production and broadcasting technology. It also sends specialists overseas to conduct surveys for the construction of TV networks, and to aid in the education of broadcast technicians.

Upon completion, in the summer of 1973, of the 23-story building and the great hall now under construction at the Broadcasting Center in Shibuya, Tokyo, NHK will transfer the entire facility now functioning at the NHK Headquarters in Uchi-saiwai-cho, downtown Tokyo.

New NHK Broadcasting Center

MISSION AND BUSINESS MANAGEMENT

ACTIVITIES AND ORGANIZATION

The fundamental mission of NHK, which was established for the purpose of contributing towards greater welfare of the people and the elevation of the cultural level of the nation, is as follows:

1. To present news, educational, cultural and entertainment programs in line with the requirements of the people and to contribute to the elevation of the cultural level of the nation.
2. To construct nation-wide networks so that the coverage will extend over the entire country and also to provide broadcasting stations for presenting local programs specifically for local communities.
3. To undertake research and investigation necessary for the progress and development of broadcasting and reception thereof.
4. To operate an overseas broadcasting service and to provide overseas broadcasting organizations with exchange programs and technical cooperation.

To carry out its mission and wide-ranging activities, NHK is organized along the following lines (page 7). The organization as it exists today is a result of reforms carried out to keep abreast of changing times, including rapid expansion and sophistication of broadcasting activities. Such reforms, of course, will continue to be carried out.

Board of Governors

This is the supreme administrative body of NHK which is vested with the power and responsibility for making decisions on important matters concerning the management and operations of NHK from the broad viewpoint of the interest of the people so that NHK may function properly in accordance with the desires of the people.

The Board of Governors deals with such important personnel matters as the appointment of the President and the Auditors and it also gives consent to the appointment of the Vice-President and Managing Directors who are appointed by the President.

The Board of Governors is composed of 13 members, appointed by the Prime Minister with the consent of both Houses of the Diet as representatives of the people. It elects a chairman from among its members. Nine members of the Board are selected from throughout the country divided into nine regions, and four other members from persons who are respected highly by the public and from among men of wide experience and learning representing various fields of education, culture, science, industry, and others.

President, Vice-President, Managing Directors

The President, nominated by the Board of Governors, is the chief executive of NHK whose duty is to supervise the day-to-day business of NHK in accordance with the policy laid down by the Board of Governors, assisted by a Vice-President and the Managing Directors. Also, the President appoints the General Managing Directors from among the Managing Directors. The terms of office of the President, Vice-President and Managing Directors are three years.

Important matters are referred to the Board of Managing Directors composed of the President, Vice-President and Managing Directors for thorough deliberation in formulating decisions.

Auditors

In order to ensure adequate administrative operation, auditors are appointed by the Board of Governors. The auditors supervise the business operations managed by the President and other officers, operating completely independent from the executive body. They report to the Board of Governors.

Business Organization

NHK is organized on a staff-and-line organization system. The staff section plans, investigates and draws up policies for management, while the line section carries out the day-to-day business. At the NHK Headquarters in Tokyo, there are six "Bureaus" in the staff section. The line section consists of the following: the General Broadcasting Administration, which is in charge of program planning and production; the Headquarters of Technical Administration and Construction, in charge of construction of broadcasting facilities and maintenance; the General Administration of Audience Services, in charge of services and collection of receivers' fees; and the Staff Administration, in charge of personnel placement and development of individual capabilities. Various subordinate departments and sections carry out the functions of the organization.

NHK operates seven regional headquarters with the Tokyo Headquarters as the center. Under each of the seven regional headquarters are many local stations. These regional headquarters and local stations are all linked with the Tokyo Headquarters, forming a nation-wide network.

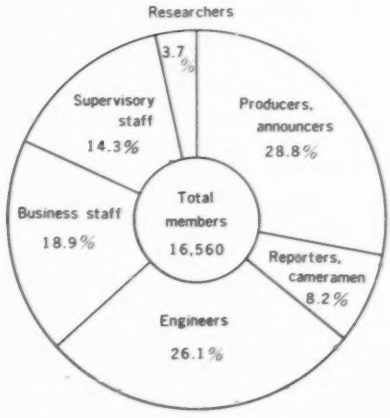
NHK has established a Research and Development Committee to coordinate the management of its four research institutes, namely, the Technical Research Laboratories, the Broadcasting Science Research Laboratories, the Radio and Television Culture Research Institute and the Public Opinion Research Institute as well as to promote research and development projects closely related to the management of broadcasting services, even while looking forward to possible future developments.

NHK also has overseas bureaus in 21 major cities where correspondents are stationed to engage in news gathering and reporting activities.

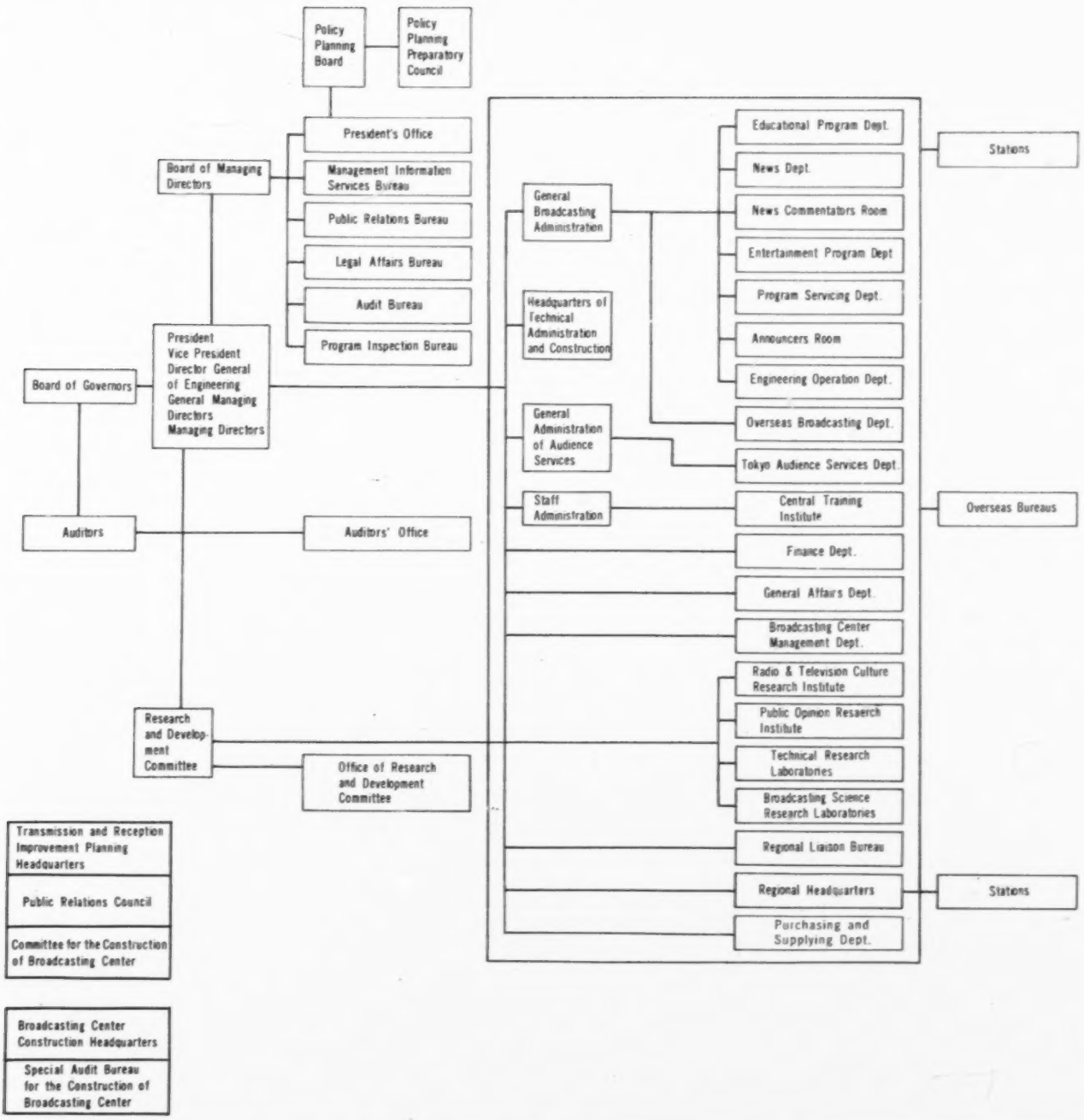
Staff Administration

NHK has staff training facilities not only at its Central Training Institute but also at all its workshops to provide rational training so that each individual member, whether as producer, reporter, announcer, or engineer, can make the best use of his individual talents. In fiscal 1972 NHK employs a total staff of 16,560.

BREAKDOWN OF STAFF MEMBER



ORGANIZATION CHART OF NHK (as of Jan. 1973)



FINANCE

NHK depends almost exclusively on receivers' fees paid by the subscribers for its income. For example, of the total business income of ¥111,483 million for fiscal 1972, ¥108,939 million is to be accounted for by income from receivers' fees.

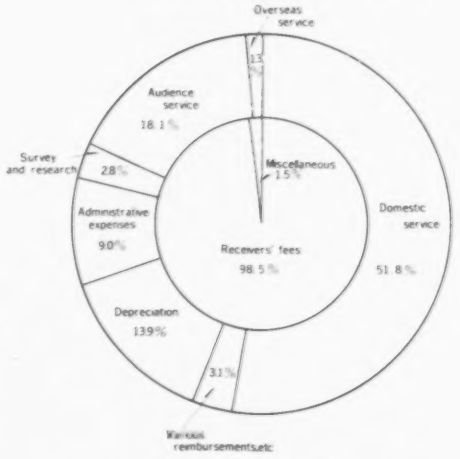
Under the Broadcast Law, NHK concludes contracts with receiving households in the country, and collects the receivers' fees. The monthly amount, separately collected for color television and for monochrome television, is ¥465 for the former and ¥315 for the latter. No charge is made for radio. The rate of collection is nearly 100%.

Revenues from receivers' fees have increased along with color television contracts in the past few years, and in fiscal 1972 the number of color contracts overtook the number of monochrome contracts.

NHK's budget of revenues and expenditures, business programs and financial programs are voluntarily drafted by NHK. These are submitted to the Minister of Posts and Telecommunications after approval by its own Board of Governors. The Minister of Posts and Telecommunications reviews the submitted programs and then submits them to the Diet, together with his opinions, for approval.

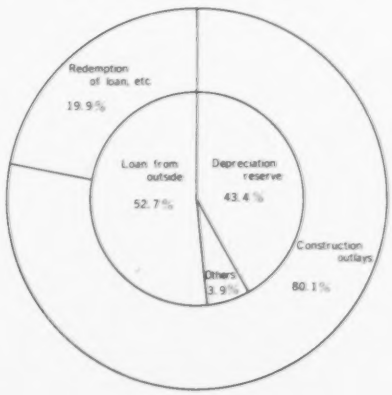
NHK'S BUDGET OF FISCAL YEAR 1972

Business income ¥111,483 million



Percentage distribution of business income is shown in the inner circle, while expenditure is given outside.

Capital income ¥35,782 million



Percentage distribution of capital income is shown in the inner circle,while expenditure is given outside.

MODERNIZATION OF MANAGEMENT

NHK's broadcasting services have made a remarkable growth and expansion in the past dozen or so years through extension of television program hours and the inauguration of color television, educational service and FM broadcasting. Furthermore, the demand for diversification of programs and enrichment of their contents has become strong. NHK's work has not only quantitatively increased but also has become qualitatively more complex.

NHK, which depends solely on receivers' fees for its financial resources, drafted a plan in 1961 for the modernization of management through the introduction of an electronic data processing system (EDPS) in order to improve the efficiency of work which is becoming ever more complex and diversified. And in 1967, the "Audience service system," aimed at 20-million-subscribers, was commenced.

In 1965, the policy of adopting the EDPS into the work of programing, production and transmission was decided, and the NHK-TOPICS (Total On-line Program and Information Control System), the first of its kind in the world, was put into full operation in October, 1968.

NHK-TOPICS

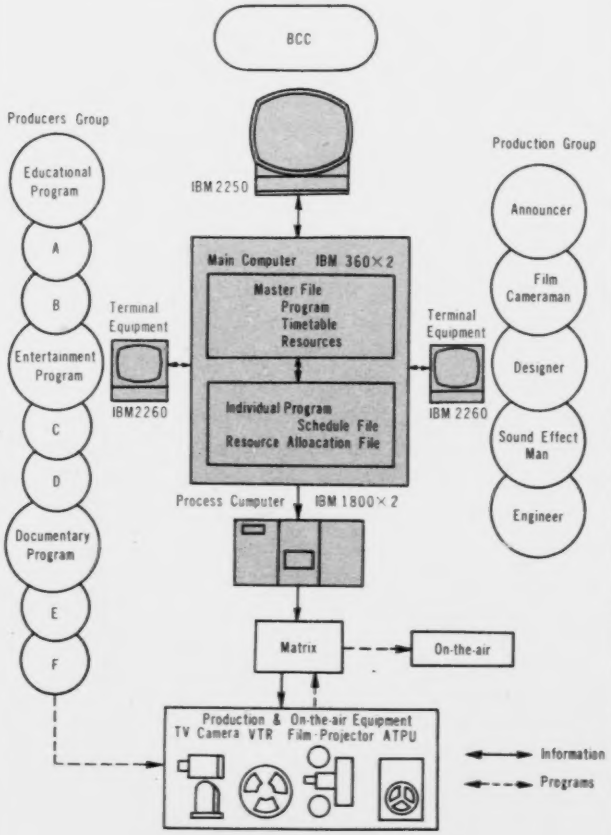
Program production, when compared with productive activities in general, (1) is more individualistic, (2) requires cooperation of various functional staffs, (3) differs in procedures because of differences in the contents, (4) permits no repetitions, and (5) is difficult to standardize because of many changes in the process. The NHK-TOPICS, developed originally at NHK in consideration of the aforementioned character of program production, is attracting attention both domestically and abroad as a pioneering computer system.

The NHK-TOPICS is divided into two parts in accordance with the principal purposes:

1. Scheduling Management and Allocating Resources Technique (SMART). Use of computers for program scheduling, calculations and allocations of facilities, equipment and personnel.
2. Automatic Broadcast Control System (ABCS). Automation of connections to channels inside and outside the stations and operation of equipment during program recording or transmission and monitoring during trouble through computer control.

Through attainment of the above aims, those in control of program production (broadcasting and engineering staffs) can be relieved of miscellaneous tasks, the number of those assigned to simple tasks can be reduced, and the staff members, thus freed from unnecessary burdens, can be channeled into the "development of creativity," which is one of the basic requisites in program production.

Heart of NHK TOPICS, BCC



OPERATIONAL SETUP FOR TOPICS

NHK-SMART

In the program production, arrangements for facilities, equipment and personnel, and various contacts had to be executed by means of slips or telephone calls. Slips totaling more than 100 in kind had to be issued for a total of more than 5,000 a day. NHK, therefore, decided to introduce the EDPS for this work to do away with slips and make instantaneous arrangements for facilities, equipment and information exchanges. The system used for this purpose is NHK-SMART.

Details of NHK-SMART are as given below.
Overall control of programing is executed at BCC (Broadcasting Control Center), which undertakes inputting of data, such as the titles of individual programs, program schedules, names of the producers, etc. into the computer.

Meanwhile, a production schedule is prepared under the network technique in line with the procedure of work, and the data, including the number of staff members, equipment, type, and number of machines and supplies, are put into the computer as input. The computer processes the information and immediately shows the result on terminal devices.

The types and quantities of equipment and supplies are memorized in the computer, and these are appropriately distributed in accordance with requests. In case any request cannot be filled, the matter is checked and adjusted at BCC. The result is indicated by the terminal device (IBM 2250).

Regarding personnel assignment, the staff in charge of a program instructs the computer to assign the required number of cameramen, lighting men, announcers, and so forth, of desired sex. The computer thereupon causes the terminal devices of various divisions to indicate the requirements. At various divisions, personnel selection is made in line with the indication and a duty schedule for the entire staff is prepared.

In the case of a schedule change, the computer speedily grasps various effects of such change and makes an indication as to whether or not a schedule readjustment is possible.

NHK-ABCS

ABCS stands for automatic broadcasting control system in which program feeding and transmission are controlled by a computer system. Its functions are broadly classified as follows:

(1) automated assignment of equipment and material for program production,
(2) automatic transmission of programs,
(3) automatic switching between nation-wide network and local broadcasts, automatic monitoring thereof and automatic operation of an exclusive telephone exchange network.

Data related to program transmission and allocation of facilities and equipment memorized in the main computer are transferred to the process computer every 10 minutes in accordance with the schedule prepared at SMART. Then connection is made to the video tape recorder or film projector in accordance with the data. By this means it is possible to start or stop the appropriate video tape recorder or film projector by remote control from the subcontrol room of a studio.

In the automatic transmission of programs, references are made in advance to the transmission data memorized in the computer and the data written on the programs to see if there are errors. This applies both to the video and sound recorded programs and live programs. The computer links the news studio and the relay lines with the program line via the program feeding matrix.

The nation-wide network program originating in Tokyo and the local program originating at some local station are automatically switched by means of the electrical signal recorded at the beginning and the end of each program. Also, special electrical signals are superimposed on the radio and television signals for the purpose of monitoring the state of reception at the local stations.

In addition to the foregoing functions, ABCS is provided with an inter-station telephone communications system (4-channel system) for promoting smooth operation of the system.

Audience Service System

Computers are used for processing receiver's fees paid by subscribers. The system, consolidated between 1968 and 1969, is described below.

NHK's receiver's fees are either paid voluntarily by the subscriber through the bank transfer system or collected personally by NHK's collectors. The computer takes care of calculations of fees collected, issuance of invoices and receipts and filing of data on the subscribers.

If payment is made through the bank, the bank transfers the necessary amount from the subscriber's account to NHK's account in accordance with the file directly sent from NHK to the bank. If the bank operates an EDPS, the invoices are recorded on magnetic tape and sent to the bank. In the case of individual collections, a collector visits each subscriber in accordance with the area administration code. In this case the collector carries with him receipts printed with EDPM. Fees collected are brought to the service office or division for the area, tabulated and sent to the Headquarters on punched paper tapes together with the latest information on the subscribers.

Information on the movements of subscribers is adjusted with the computer once a week on the basis of data collected from all parts of the country, and a master file for some 24 million subscribers in the country is prepared. In order to simplify desk work processing at the service divisions of local stations and service offices by further rationalizing the system, NHK set up the local online terminal (LOT) at the more important service offices in 1970. This setup has greatly improved the efficiency of computing and verifying processes and business transactions at these offices. Improvements are also being undertaken with respect to payments through the banks so that greater convenience will be offered the subscribers who may be enabled to utilize any bank for the purpose of paying receiver's fees.

NHK

PROGRAMS

OUTLINE

The Broadcast Law provides NHK's programing and broadcasting should conform to the following basic principles.

1) NHK should exert its utmost to meet public requirements and to contribute towards elevation of the cultural level of the people by generously broadcasting wholesome programs.

2) NHK should strive to preserve what is desirable of the past culture of the nation as well as to foster and disseminate new culture.

3) NHK should present local, as well as nationwide network programs.

NHK now operates five different nationwide networks for domestic broadcasts. These include two for television, two for radio and one FM sound. The General TV presents balanced programs, such as news, educational, cultural, and entertainment for people at large, while the Educational TV presents educational programs for correspondence courses and for adult education.

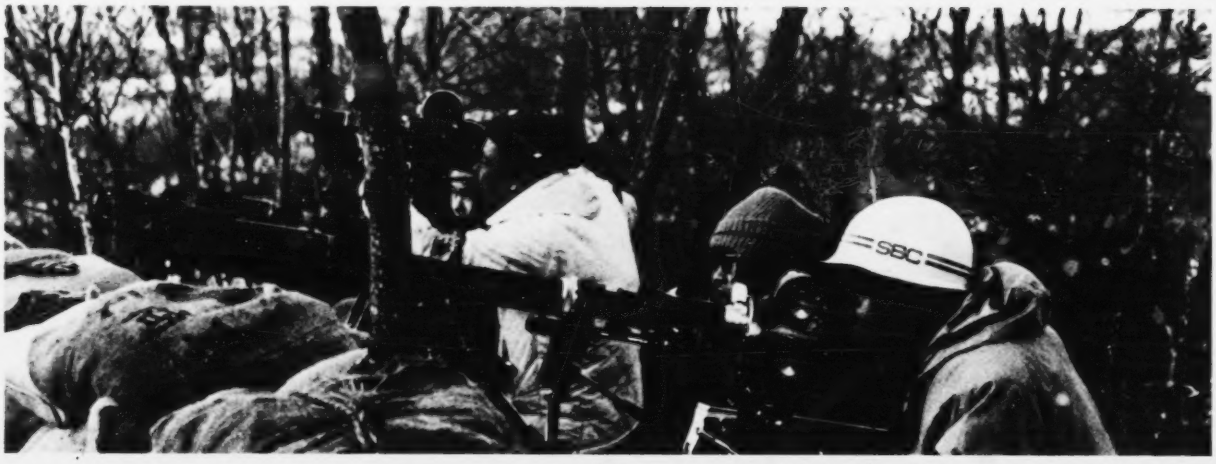
In radio broadcasts, the First Radio Network conducts general programs, and the Second Radio Network broadcasts eductional and cultural programs.

The FM network makes use of its special characteristic to broadcast fine music and a wide variety of other programs, including news, entertainment, and cultural programs, as well as local news.

In order to maintain the propriety of its domestic programs, NHK has established program councils composed of learned and experienced people. The Central Program Council is established at the Headquarters in Tokyo while the Local program Council is set up in each of the eight regional stations. These program councils, as a rule, meet once a month to advise the President of NHK on matters connected with domestic program standards and fundamental programing plans prepared each year. It is also the duty of the councils to submit to the President opinions considered necessary for ensuring propriety of programs.

While presenting programs, NHK examines the contents and manner of presentation in the light of the domestic program standards.

NEWS, SPORTS AND LOCAL PROGRAMS



News cameramen covering the Asama Mountain Lodge incident

Newscasts

NHK makes special efforts in news program planning and compiling in order to meet the requirements of present-day society in which information plays an increasingly important role. NHK is also discharging its mission as a public broadcaster by providing information from an impartial standpoint at all times.

As of January 1, 1973 news and related programs were presented for a total of about 40 hours a week on the General TV Service, for about 57 hours on the Radio First Network, for about 7 hours on the Radio Second Network and for about 16 hours on the FM Service.

TV news programs are centered on the 7 : 00 a.m., 7:00 p.m. and 9:00 p.m. newscasts, which undertake " fine grained " presentation of domestic and overseas news. In addition to the above, newscasts of from 5 to 10 minutes in duration cover other time zones reserved for news.

Radio news is presented, as a rule, every hour on the hour. The FM Service, because of its special nature, emphasizes local broadcasts, presenting local news of original compilation, which is more in line with conditions prevalent in various prefectural unit areas.

Information programs other than news include "Studio 102", "Report by NHK Overseas Correspondents" and "News Documentary". Presented early in the morning, "Studio 102" takes up the day's events or the latest topics and presents them in the form of a commentary, inserting talks by the principals concerned with such events or topics. It also takes advantage of the nationwide network to present topics arising in various parts of the country. The "Report by NHK Overseas Correspondents" is presented between 7 : 30 and 8 : 00 p.m. to feature various overseas topics for the benefit of the Japanese audience. "News Documentary" is also presented in the evening. On the radio, traffic information, stock market news, prices of fresh foodstuffs and local news are compiled, taking advantage of the special characteristics of radio.

In addition to the foregoing regularly scheduled programs, NHK takes advantage of the simultaneity of functioning inherent in radio and television and powerful national networks to present information regarding disasters and accidents. The merits of the information medium called broadcasting are also utilized to the utmost for actively and frequently campaigning, on a national scale, against environmental pollution, traffic accidents and numerous other current social problems.

By virtue of its position as a public broadcaster, NHK endeavors to present scenes of debates in the Diet, which is the organ representing the Japanese people, as well as interparty forums. Further, in order to be of service in promoting better mutual understanding and amicable relations with overseas peoples, NHK presents, once a month, a large-scale special program titled "Our World, 1970's", in which domestic problems are considered on a worldwide basis. Satellite transmissions are frequently utilized for this program.

In order to sustain these news and information programs, NHK assigns 180 correspondents throughout Japan and at 20 overseas bureaus in foreign cities.

Sportscasts

NHK undertakes timely relay of amateur and professional sports events on television and radio. A typical amateur sports event is the all-Japan high school baseball tournament held every year in spring and summer. In this tournament, high school baseball teams representing various areas of the country, after winning preliminary local matches, vie with one another for the national championship. NHK broadcasting stations, including local stations, undertake relay broadcasting of this tournament from local preliminaries to the finals. Other popular sports events broadcast include soccer, volleyball and gymnastics. However, NHK carefully avoids being partial only to very popular sports in its programing. Regularly broadcast professional sports include Japanese style wrestling tournaments and baseball games.

The summer and winter Olympic Games were held in 1972. NHK took charge of the production of international pictures for the Winter Games. These were transmitted from Sapporo, the site of Games, to all parts of the world. For the summer Games, NHK dispatched a staff of 57 to Munich to cover the events.

Local Services

Under existing political, administrative and economic conditions and from differences in climatic conditions and customs and manners, regional characteristics peculiar to various prefectures are found in Japan. Under the circumstances, NHK has been endeavoring to present, through its local stations, information and public notices of local automonous bodies closely related to everyday life in local communities, with the prefectural areas as basic units of coverage. Local services are provided principally on the General TV Service, Radio First Network and FM Service. At present, local programs are presented for an average of 1 hour and 30 minutes on television, for 3 hours and 10 minutes on AM radio and for 1 hour and 38 minutes on FM in a day.

EDUCATIONAL PROGRAMS

Inclusion of items with educational and cultural contents in broadcasting programs has been the irrevocable basic policy of NHK since its establishment. As of January 1, 1973, NHK's educational and cultural programs presented on television and radio totaled 422 hours and 24 minutes a week. NHK's school broadcasts stress items which children have difficulty in grasping from the textbooks and verbal explanations alone in order to supplement classroom work conducted by teachers.

High school correspondence courses are presented principally for those who are unable to attend regular high schools after completing compulsory education. The aim is to enhance materialization of equal educational opportunity for all, which is the ideal of modern society.

In 1970, the citizen's university course for adults was set up. In this course, college-level subjects are presented. In addition, NHK compiles programs for teaching various skills and foreign languages, programs intended for women, those intended for people engaged in farming, forestry and fisheries and for employees of small and medium enterprises. These programs are compiled systematically over protracted periods, and textbooks as aids to listening and viewing are published. NHK also attaches importance to programs intended for the physically handicapped. These include "TV Deaf School", "Class For Mentally Handicapped Children" and the "Hour for the Blind".

School Programs

Since the radio programs for schools began in 1935, NHK has gradually increased the number of such programs. Currently (as of Jan., 1973), NHK transmits to schools 111 different types of programs totaling 28 hours 10 minutes a week.

These radio programs for schools include Japanese language, morals, music, English, social studies, etc., and they are transmitted to primary schools, junior and senior high schools. One of the social studies programs is produced by each of the regional stations throughout the country for its own local service.

NHK began its TV programs for schools in 1953, simultaneously with the commencement of telecasts. In 1959, with the introduction of TV Education Service, NHK expanded its TV school broadcasts. Currently (as of Jan., 1973) NHK transmits to schools 116 programs, totaling 33 hours 55 minutes a week.

These television programs for schools include science, social studies, morals, music, English, arts, etc., and they are transmitted to kindergartens, primary schools, junior and senior high schools. All the programs for kindergartens and most of the programs for primary education are in color.

Programing is based not only on the course of study issued by the Ministry of Education but also on advice given by the Local Advisory Committees on School Broadcasting and the Central Advisory Committee on School Broadcasting. While plans for programs are thus adopted, production thereof is undertaken with the specialists' committees for respective series comprising competent Education Ministry officials, school teachers and educators.

One of the outstanding features of school broadcasting in Japan is that teachers, who use the service, NHK and the producers cooperate in its improvement. School teachers have voluntarily organized the National Radio and TV Education Association.

The Association was made up of eight regional associations which comprise 54 prefectural associations. The Association, however, was reorganized in 1968 in order to meet the requirements of advancing and diversifying studies. Separate organizations were established for different categories of school, such as for primary schools and junior high schools. Its membership consists of educational institutions ranging from day-nurseries and kindergartens to high schools, totaling approximately 55,000. Since its inauguration in 1950, the Association has expanded year by year, and at present an average of 1,700 study meetings are held annually in which an aggregate of about 300,000 persons participate.

Among the schools which are equipped with both radio and television receiving sets, those which are utilizing the school programs systematically are as follows:

(as of Sept. 1971)

	TV		Radio	
	Percentage	Number	Percentage	Number
Kindergarten	80.7%	8,190	27.0%	2,480
Primary School	89.7%	22,160	44.6%	10,640
Junior High School	36.9%	3,790	34.9%	3,690
Senior High School	31.3%	1,220	41.8%	1,680

Television programs for social studies can enrich classroom learning activity by presenting conditions prevailing in various parts of Japan and other nations through films. The audio-visual method of teaching made possible with school programs help to promote greater interest in learning.

Correspondence Educational Programs

NHK established "High School Course" programs in 1959, simultaneously with commencement of television school broadcasting. This was switched to the "High School Correspondence Course" in 1963, when the NHK Correspondence High School was established.

The "High School Correspondence Course" presented on Educational TV Service and Second Radio Network now includes all the requirements consisting of 35 subjects. In connection with these subjects, television presents 15 hours a week, while radio presents 21 hours and 20 minutes a week. Should high school students utilize these programs, they are exempted from schooling (personal guidance) under the course of study issued by the Ministry of Education. This measure, together with school programs, has been a real help to study activities of working young people.

NHK's college correspondence education broadcasts started in radio in 1961 and in television in 1965. At present, NHK college correspondence course programs are transmitted over radio, 12 programs 4 hours, over television 13 programs 6 hours 30 minutes, a week.

Social Educational Programs

In view of the educational importance of radio and television, NHK presents the following programs in parallel with school programs:

1. Educational programs for homes for the purpose of cultivating knowledge and wholesome sentiments in infants and pre-school children, as well as promoting the wholesome development of young people.
2. Lecture course in languages which directly serve in daily life; practical courses in vocational guidance.
3. Youth programs, women's programs which serve as livelihood guidance intended for group listening and viewing.
4. Programs for deaf and dumb children; special educational programs for mentally retarded children.

These are presented over the general and educational TV services and over the First and Second radio networks at hours which are best suited to potential listeners and viewers of respective programs.

Programs for Children
Programs directed at small children provide plenty of happy dreams and hopes. In radio nursery programs, "Pippo Pippo Bon Bon," full of songs and music, is highly popular. In TV, there are numbers of programs for kindergartens and day-nurseries, as well as "With Mother" for mothers and their children to enjoy happy moments together.

Foreign Language Lessons
NHK's foreign language lessons which have a long history cover English, French, German, Russian, Spanish and Chinese. In addition, NHK's presentation of "Sesame Street", produced by CTW (Children's Television Workshop) of U.S. in the original language, is attracting attention not only from those interested in foreign languages but also from Japanese educators.

Vocational and Technical Courses
NHK presents various technical courses directly related to the people's daily life. These programs serve as an effective means of acquiring needed knowledge in various fields or of acquiring public licenses or qualifications for particular skills. For example, specialist instructors provide guidance in playing musical instruments, in computer operation, electrical engineering, automobile repair, etc.

Young People's Programs
Since early in its history, NHK has been engaged in a long series of far-ranging campaigns designed to promote the sound growth of young people, who are destined to shoulder the affairs of the next generation. With "Plaza for Youth", "For Better Village Life", "With Teenagers", etc. covering rural as well as urban youths, NHK has been featuring opinions of young people living in these areas and sponsoring discussion meetings of growing youths with the objective of suggesting the best possible future course for them.

Farmers' Programs
These programs endeavor to clarify the problems faced by farming and fishing industries under rapidly changing conditions and to suggest a desirable future course for these industries. In particular, with respect to the problem of the exodus of young people from rural areas, "Radio Agriculture School" on the radio and "For the Better Village Life" on television are presented to provide opportunities for discussion among young farmers on problems relative to new farm management as well as for strengthening solidarity among them.

Special Programs for Physically or Mentally Handicapped Children
Since the inception of the "TV Deaf School" in 1961, NHK has been placing particular emphasis on these special educational programs not only for the benefit of the unfortunate children but also for the purpose of creating public interest in the need of such education. The results achieved so far are highly appreciated, not only by the families of handicapped children, but also by educators. In 1965, the "Merry Classroom," another TV special class for mentally retarded children was inaugurated. For stammerers, a special language training class has been broadcast once a week in the Educational TV Service beginning in 1966.

CULTURAL PROGRAMS

In these days, said to be the age of diversification, audience requirements for cultural programs cover a wide range, from those presenting down-to-earth information to high-level cultural programs. Particularly in 1972 there was a strong audience demand for programs that treated the theme "abundance and dignity befitting man". In order to meet such a demand, NHK compiled and presented programs introducing world-wide currents of thought, new science, technology and knowledge, artistic and historical analyses.

Programs treating subjects related to everyday life included "Hello, Madam" and "Today's Menu", which took up matters familiar to daily life, thus offering practical information. Also, with "Hobby and You", which was intended to enrich people's life, an attempt was made to provide a common ground for the whole family to enjoy. Such large number of programs related to the utilization of leisure hours may be considered a special feature of 1972.

In the field of scientific programs, focus was trained on environmental pollution, which was considered the most serious question of today. Also in view of aroused interest in the protection of nature, programs introducing nature both in Japan and abroad were presented, following the similar policy of the preceding year. These included the "Science for Better Life" depicting the relation of modern science to society from the standpoint of layman, the "Nature Album", which NHK has been compiling for many years and "Nature in Asia" produced on the basis of techniques cultivated through work on the "Nature Album".

Programs related to medical science and health included not only those dealing with everyday health care and medical topics but also "Challenging Cancer" which depicted full-scale work on cancer.

General cultural programs included the "Spot Light" and the "Cultural Feature". In the former, the "thing" that a performer designates in the studio serves as the starting point, and unexpected connections between the rich personality of the performer and the "thing" are gradually unfolded, thus incorporating an element of suspense. In the latter, subject matter is selected from a wide range of fields centered on culture and arts and these are organized into a special program using diverse production techniques.

The "Inquiry into Japanese History" is a history-probing program that has been enjoying a high reputation since it was started in 1970. In this program, a historical character or event is taken up and highly individualistic talks and comments are presented by writers and notables deeply interested in the character or event. In 1972, coverage was expanded to overseas countries and the footsteps of Japanese people, who have accomplished things abroad, were followed up. The program is rated highly as it has won prizes at various contests held in Japan itself.

Besides the foregoing, NHK presents, on its Educational Television Service, the "Cultural Feature" for one hour from 8:00 p.m. daily from Wednesday through Saturday. This program has been on the air for many years. In this program materials that serve as food for cultural attainments of modern man are selected from a wide range of fields, including the cultural, political, scientific and educational fields, and points at issue in the respective fields are probed into as deeply as possible.

Radio programs of similar nature include "Hobby Notes" and "How To Talk Well". The "Hobby Notes" is a program that may well be called a radio essay and has a history of more than 20 years. In this program, interesting topics are presented in straight talk by some highly individualistic performer. It is presented not only from Tokyo but from local stations as well.

The "Religious Hour" is presented both on radio and television. In Japan, many religions, such as Shintoism, Buddhism, Christianity, etc. exist side by side in Japan. In this program, the religious heritage of Japan is examined in the light of the modern age, thereby providing the audience with pointers towards discovery of purpose in modern life and helping them to elevate their religious sentiments and their insight into human nature. The program covers tenets of various sects.

Scene from costume TV drama "Kunitori Monogatari"

ENTERTAINMENT PROGRAMS

While broadcasting is an effective medium for news reporting, education and cultural advancement, it also serves as an excellent medium for entertainment. In particular, the appearance of television has made available diversified forms of entertainment to people who have had little opportunity for enjoying them.

NHK compiles entertainment programs with wholesome contents so as to meet the desires of the audience for entertainment the whole family can enjoy.

In all entertainment programs, planning and directing as well as the quality of the scripts, the skill of actors and the impression they leave on the audience greatly affect the impact of the programs. Under the circumstances, NHK, while endeavoring to study unique methods of production with the advice of various committees related to program planning and production, puts much effort in the discovery and training of new script writers and talents.

Among representative dramatic programs of NHK is a one-year serial presented daily for 15 minutes from 8:15 a.m. This program has already become the favorite of the morning audience and has established itself as a high-rating item.

From April 1973 a new program titled "The Family of the North", depicting the life of a young woman who lives in a local city and profiles of the family that surrounds her, will be presented.

A large-scale drama is also presented for 45 minutes on Sunday evening. This also is a one-year serial. This program commenced in 1963 and is now attracting wide attention as a full-scale television drama. From January 1973 the "Kunitori Monogatari", which depicts the life of a military leader who lived in the age of civil wars (16th century), has been broadcast. In addition a 60-minute serial drama is presented from 8:00 p.m.

While people who enjoy music are increasing in all parts of Japan, NHK presents a large variety of musical programs intended for such audiences. These are so arranged to appeal to all age groups ranging from infants to aged people. With consideration given to the growth of the audiences in their ability to enjoy good music, not only classical music but also modern music and even folk music of the various peoples of the world are introduced.

A typical musical program enjoying a high rating is the "Japanese Folksong Festival". This is an audience-participation program produced principally by local stations in all parts of Japan. The aim of this program is to enjoy local music and other entertainment arts along with the attending local people.

On the FM service, the special character of this frequency band is fully exploited to present musical programs of high sound quality. Also, as the service emphasizes local broadcasts, the stations concerned frequently invite the audience to the studios to produce audience-participation programs.

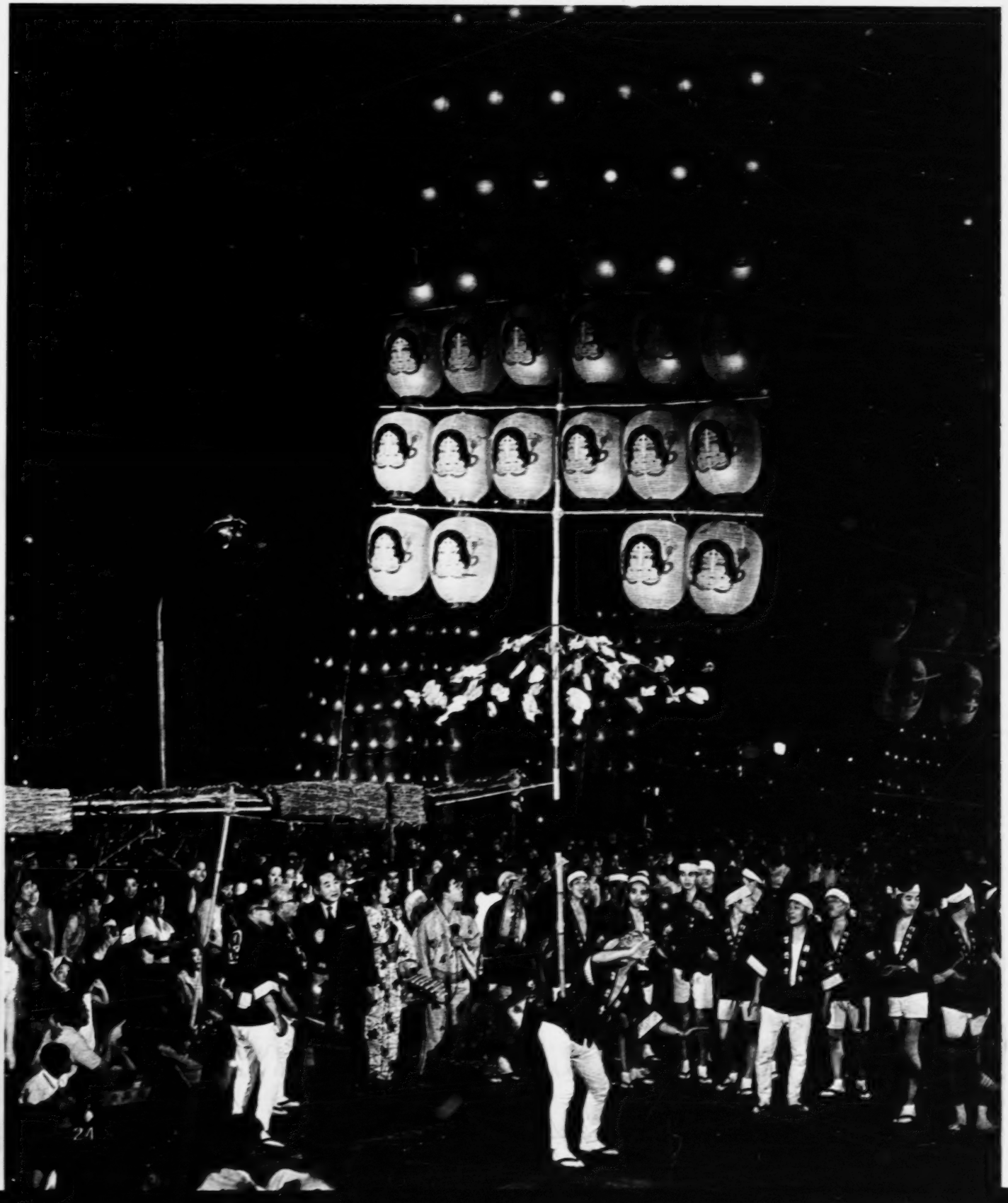
While NHK endeavors to provide the people at all times with entertainment programs of high quality, this is accomplished by inviting from time to time foreign artists of world-wide renown.

In order to improve the musical level of the nation, NHK sponsors its own NHK Symphony Orchestra (the oldest and one of the finest orchestras in Japan, having 120 members). On the other hand, NHK occasionally invites musicians and orchestras from foreign countries.

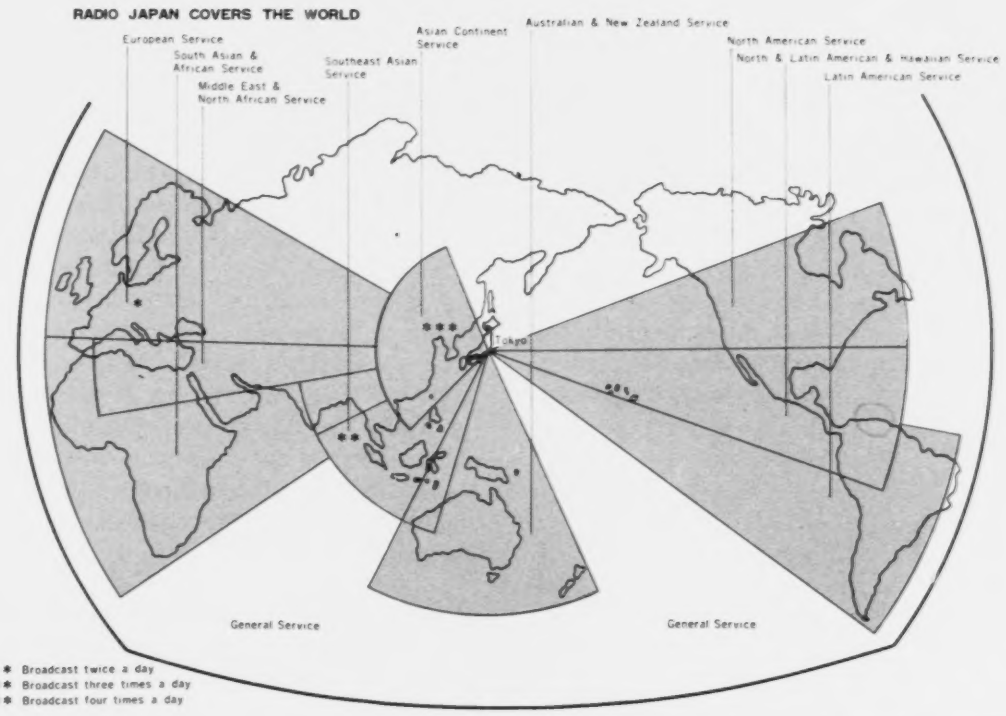
In addition to the foregoing, NHK endeavors to introduce quality entertainment programs of the world through program exchange with various overseas broadcasting organizations. One such program is the "One-man Show of the World". This series comprises one-man shows of noted artists produced by American and European broadcasting organizations.

Scene from a public performance of Shang-hai Ballet Troupe in Japan

"Japanese Folk Song Festival" introduces traditional folk entertainment



OVERSEAS SERVICE


RADIO JAPAN COVERS THE WORLD
European Service
South Asian & African Service
Middle East & North African Service
Southeast Asian Service
Asian Continent Service
Australian & New Zealand Service
North American Service
North & Latin American & Hawaiian Service
Latin American Service
Tokyo
General Service
General Service
* Broadcast twice a day
** Broadcast three times a day
*** Broadcast four times a day

REGIONAL SERVICE

(as of Jan. 1, 1973)

TRANSMISSION	TIME (GMT)	LANGUAGES
Middle East & North African Sce	1745—1915	English (30′) French (30′) Arabic (30′)
North American Sce	2345—0045	English (60′)
North & Latin American & Hawaiian Sce	0100—0300	Japanese (30′) English (60′) Spanish (30′)
European Sce (1)	0645—0845	Swedish (15′) German (30′) French (30′) English (30′) Italian (15′)
European Sce (2)	1930—2100	Russian (30′) German (30′) English (30′)
Latin American Sce	0900—1100	Japanese (60′) Portuguese (30′) Spanish (30′)
Australian & New Zealand Sce	0930—1030	English (60′)
Asian Continent Sce (1)	1230—1330	Russian (30′) Chinese (30′)
Asian Continent Sce (2)	2300—2330	Chinese (30′)
Asian Continent Sce (3)	1130—1215	Korean (45′)
Asian Continent Sce (4)	2200—2245	Korean (45′)
Southeast Asian Sce (1)	0945—1115	Chinese (30′) Fukienese (15′) Cantonese (15′) Vietnamese (30′)
Southeast Asian Sce (2)	1045—1215	English (30′) Indonesian (30′) Malay (30′)
Southeast Asian Sce (3)	1200—1530	French (30′) Vietnamese (30′) Burmese (30′) Tai (30′) Chinese (30′) Fukiense (15′) Cantonese (15′) Indonesian (30′)
South Asian & African Sce	1430—1730	Bengali (30′) Hindi (30′) Urdu (30′) Swahili (30′) English (30′) French (30′)

GENERAL SERVICE	0000—0030 0100—0130 0200—0230 0300—0330 0400—0430 0500—0530	0600—0630 0700—0730 0800—0830 0900—0930 1000—1100 1100—1130	1200—1230 1300—1330 1400—1500 1500—1530 1600—1630 1700—1730	1800—1830 1900—1930 2000—2030 2100—2130 2200—2230 2300—2400	English & Japanese

NHK's Overseas Broadcasting Service, known under the name of Radio Japan, began in 1935 and hence it has a history of 37 years. It is now on the air for a total of 37 broadcasting hours conducted daily in 23 different languages. Its programs, comprising quick and accurate newscasts, commentaries, information introducing Japanese culture, social and industrial conditions, and musical and entertainment programs featuring Japan, are all highly appreciated by listeners in various countries.

Fundamental Policy for Programing

The Brodcast Law provides in regard to the compilation of the Overseas Broadcasting Programs: "The Corporation shall . . . exert its efforts in contributing to the promotion of international friendship and to the development of economic interchanges with foreign countries; at the same time, it shall endeavor to provide appropriate entertainments to our nationals in foreign countries." NHK conducts overseas broadcasting service independently from the standpoint of political neutrality and public utility under the above basic principles in accordance with the spirit of the Broadcast Law and the Standards of NHK's Overseas Broadcasting Programs.

NHK's Overseas Broadcasting Service is divided into the General Service and Regional Service, on the basis of the differences in purpose and the contents of programs. The General Service may be considered the world-wide service directed to all parts of the world, and mainly news and commentaries are transmitted both in English and Japanese for a total of 30 minutes every hour, except for three occasions on which it is on the air for one hour. Thus the General Service occupies a total of 13 hours and 30 minutes daily. The Regional Service is beamed to specific regions, including Southeast Asia, Europe, North and Latin America and Africa, etc. The programs are arranged in full consideration of the specific conditions of the respective regions, political, religious, social and economic, so that the programs may conform with the interests of the listeners in each region. At present, these broadcasts are conducted in 23 languages for a total of 23 hours 30 minutes daily. In compiling the programs, NHK utilizes the Overseas Broadcast Program Deliveration Council composed of outside experts who are persons of learning and experience in order to seek their views. Also NHK periodically conducts surveys of overseas listeners, soliciting their opinions with a view to improving programs as much as possible.

Contents of the Programs

More than half the total broadcasting hours in the overseas service are devoted to news and news commentaries. Presenting accurate and objective news speedily as well as comments, such as "Commentary", "Weekly News Review", "Current Affairs" and "Weekly Editorial Roundup" based on newspaper editorials, the policies of Japan are clarified to overseas listeners. The "Asian News" is intended to offer news items to the broadcasting organizations of various Asian nations.

Information programs are aimed at presenting Japan's industries, living patterns, culture, science and Japanese thoughts. These include "Today's Japan", and "One in a Hundred Million". Information programs newly introduced in 1972 included "Tokyo Calling" and "A Sketch of Japan" "Let's Learn Japanese", a program that provides an opportunity to study the Japanese language for overseas listeners also enjoys wide popularity.

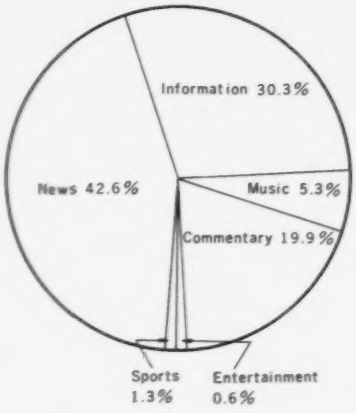
Entertainment programs, broadcast in the Japanese language, are intended principally for Japanese in North America, Hawaii, Latin America and those on ocean-going vessels and fishing vessels. These comprise NHK's domestic entertainment programs and Japanese music.

Letters from Radio Japan's listeners have increased annually, and today Radio Japan receives an average of about 3,000 letters a day. Radio Japan also holds essay contests and invites the winners on a tour of Japan.

Improvement of Reception Conditions

While it is important to make efforts for the improvement of the programs, it is also required particularly for the Overseas Broadcasting Service to improve the reception conditions. For this purpose, NHK is striving to acquire correct information regarding reception conditions of Radio Japan periodically from its listeners at various places of the world, program monitors assigned in each region and foreign broadcasting stations which are cooperating in this task. On assessment of these reports, NHK is constantly striving to improve transmission facilities and adjust the frequency bands and broadcasting hours.

THE BREAKDOWN OF THE PROGRAMS OF RADIO JAPAN
(as of Jan. 1973)



Radio Japan personnel interviewing Chilean soccer team

Panoramic view of the new NHK Broadcasting Center

NHK BROADCASTING CENTER

New NHK Hall

A pipe organ in the new NHK Hall

NHK's Broadcasting Center in Shibuya, Tokyo, is the largest and by far the most sophisticated of its 68 broadcasting stations located in the leading cities of the nation.

The new NHK Headquarters building under construction at the site of the Broadcasting Center since 1970 is to be completed this summer. At that time all functions now operating at the Headquarters at Uchisaiwai-cho, downtown Tokyo, such as transmission of radio and television programs, news program production, overseas broadcasting service, audience services and business management, will be transferred to the new Headquarters. This is expected to enhance the efficiency of all the services.

The new Headquarters building nearing completion has a total floor space of about 65,000 square meters. It stands 23 stories tall, with one story below the ground.

A great hall capable of seating 4,000 people is also to be completed beside the Headquarters building. This is a multi-purpose hall incorporating crystallization acoustic design techniques and is to be used for TV and radio programs, concerts and operas.

The center houses 20 television studios, including 11 color studios, 24 radio studios and 50 other rooms, including those for dubbing, resonances, rehearsal and filming.

The majority of NHK's educational, cultural and entertainment programs are produced in these studios; these total nearly 1,000 a week.

The distinctive feature of the Broadcasting Center is the concentration of studios and rooms related to television program production on the first floor while the technical facilities are located on the second floor. This system assures smooth and efficient program production and simplification of equipment operation and maintenance.

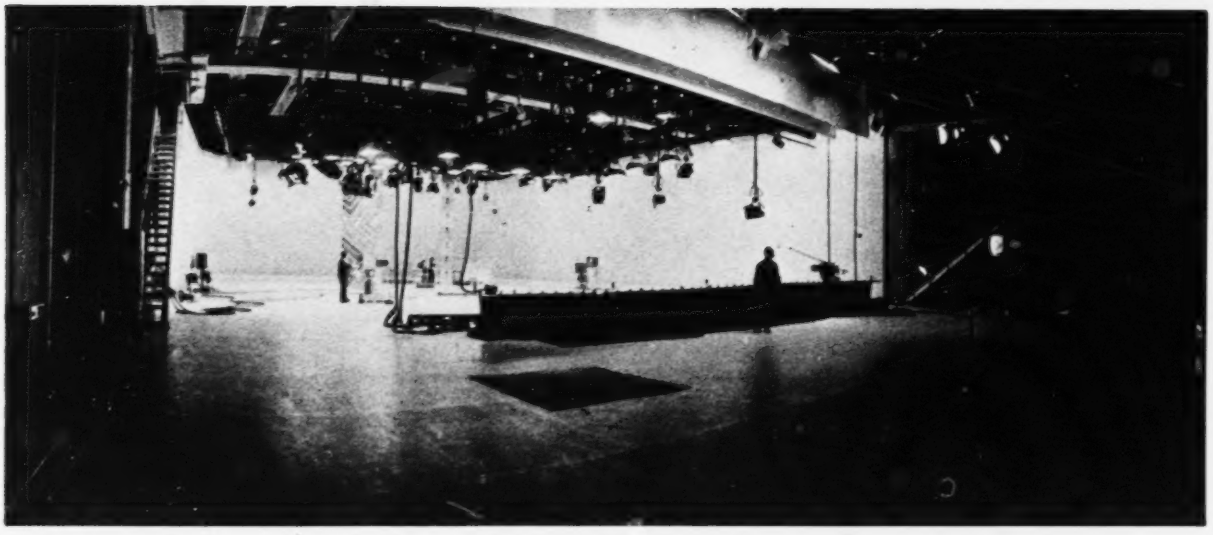
The television studios on the first floor are conveniently flanked by performers' waiting rooms and makeup rooms on one side and by stage sets and property storage areas on the other. The studios are connected with the waiting rooms and production staff offices through the "wall adjust-

ment" doors. The stage property and set storages are also directly connected with the studios to assure efficient progress of program production.

Another feature of the Broadcasting Center is the provision of the visitors' course, which allows the visitors to look through the principal parts of the building without disturbing program production.

This visitors' course not only allows a glimpse into the scenes of program production but includes, on the route, exhibits of data and meterials related to broadcasting. For this reason, it is highly popular with all visitors who come to the center, ranging from little children and students to adults. Such visitors, both Japanese and foreigners, totaled 2,160,000 in 1972.

Studio 101



TECHNIQUE AND FACILITIES

TV sub-control room

OUTLINE

It is incumbent upon NHK to complete its national radio and television networks to facilitate reception throughout the country. In line with this important mission, NHK is also striving to maintain and strengthen its broadcasting facilities so that its broadcasts may always be of high quality. For this purpose, NHK is much concerned about the improvement of its broadcast engineering to give fullest satisfaction to its viewers and listeners by modernizing its facilities and operation.

Television

NHK completed its first nation-wide television network with 525 lines standards on February 1, 1953. Research in television began at the Technical Research Laboratories of NHK in March 1931, and, in March 1939, Japan's first experimental television signals were beamed from the Laboratories. Work on television was later suspended because of the war, but on March 21, 1950, an experimental television service was inaugurated in Tokyo. This was followed by the establishment of services in Osaka and Nagoya in 1952. Shortly thereafter, the first microwave link was established connecting Tokyo, Nagoya and Osaka. This laid the foundation for a full-scale nation-wide television service.

On January 10, 1959, the Educational Television Service was established, and together with the General Televison Service, television started on its way to rapid development. On February 20, 1968, Japan's first UHF station was built in Tokushima. Since then, construction of stations was promoted at a rapid pace for areas experiencing difficulty in the reception of VHF signals, which had become extremely crowded. On January 4, 1971, experimental UHF television services commenced in Tokyo and Osaka. This actually brought to Japan an age of mixed UHF-VHF television.

Research in color television, which started in December 1950, led to a successful experimental colorcasting in 1954 under the NTSC system in the UHF band. In 1960, colorcasting under the NTSC system in the VHF band was inaugurated in Tokyo and Osaka. In July 1970, NHK commenced experimental services under the television sound multiplex broadcasting system in Tokyo and Osaka. By means of this system, scenes of the Japan World Exposition 1970 were presented in both English and Japanese. At present, a foreign drama program and 7 p.m. News are being presented every week under the television sound multiplex broadcasting system. Under this system, subcarrier wave (31.5 kHz) is used as the second sound signal, and the sound carrier wave is modulated together with the main sound wave.

Radio

NHK commenced radio broadcasting in Tokyo on March 22, 1925. In June of the same year, radio broadcasting was started also in Osaka and Nagoya. In 1928, radio spread to Sapporo, Kumamoto, Sendai and Hiroshima. Linking of these stations established the foundation of a nation-wide network.

Experimental stereo broadcasting began in 1952, and, in November 1953, the world's first stereo broadcasting service was established, simultaneously using the First and the Second Radio networks.

In 1957, an experimental FM service was implemented. In 1963, FM-stereo broadcasting began under the pilot tone system. Today, the FM Service covers the entire nation.

TECHNICAL OPERATION CENTER

The pivotal facility of the broadcasting automation is the Technical Operation Center (TOC). There is one TOC at the Tokyo Headquarters and another at the Broadcasting Center, but these are linked with cables so that they form a single operational unit. The TOC at the Headquarters is for program transmission and the one at the Broadcasting Center is for program production.

The center of the TOC is the display unit, which indicates information on program transmission and production. The program transmission display unit is provided, in addition to the air monitors for television, with CRT display units indicating the program on the air and of the next program in letters and numerals for the five television and radio services. The indication includes the title of the program, the time broadcasting begins, the originating station, and the condition of the network. On the production data display unit, availability of VTR, film projector, audio tape playback unit, etc. can be seen at a glance. The availability of interconnected equipment, moreover, is indicated by flickering of the lamp operated by means of a button on the operation console.

The TOC is provided with a great deal of equipment. These include the transmitting matrix, preset matrix, lumped equipment group (VTR, film projector, camera control unit, audio tape playback unit), offering equipment (announce machine, FSS) and an exclusive telephone exchange.

The transmitting matrix consists of a group of switches for switching the transmitting programs from VTRs and studios to the transmitting stations or to the local stations in accordance with the schedule. The preset matrix is not only for program switching but also for simultaneous switching of the remote control line, sync line and lines for reading the material code recorded on the tape automatic transmission.

The outstanding feature of lumped equipment group is that all of them can be remotely controlled

Technical Operation Center

or controlled with the electronic computer. The audio tape playback unit, in particular, has a capacity for playing 42 reels of tape, set in order.

In case any trouble develops in the function of the TOC, the trouble must be quickly discovered from among these numerous equipment and must be repaired. A special line printer prints out information from the computer regarding the trouble, or it can input the information conversely into the computer. It can also cut off the equipment in which trouble has developed. If any trouble develops in the computer or the matrix, transmissions and production can be continued by manual operation, since a system-down backup unit, which is independent from the automatic control system, is provided for the purpose.

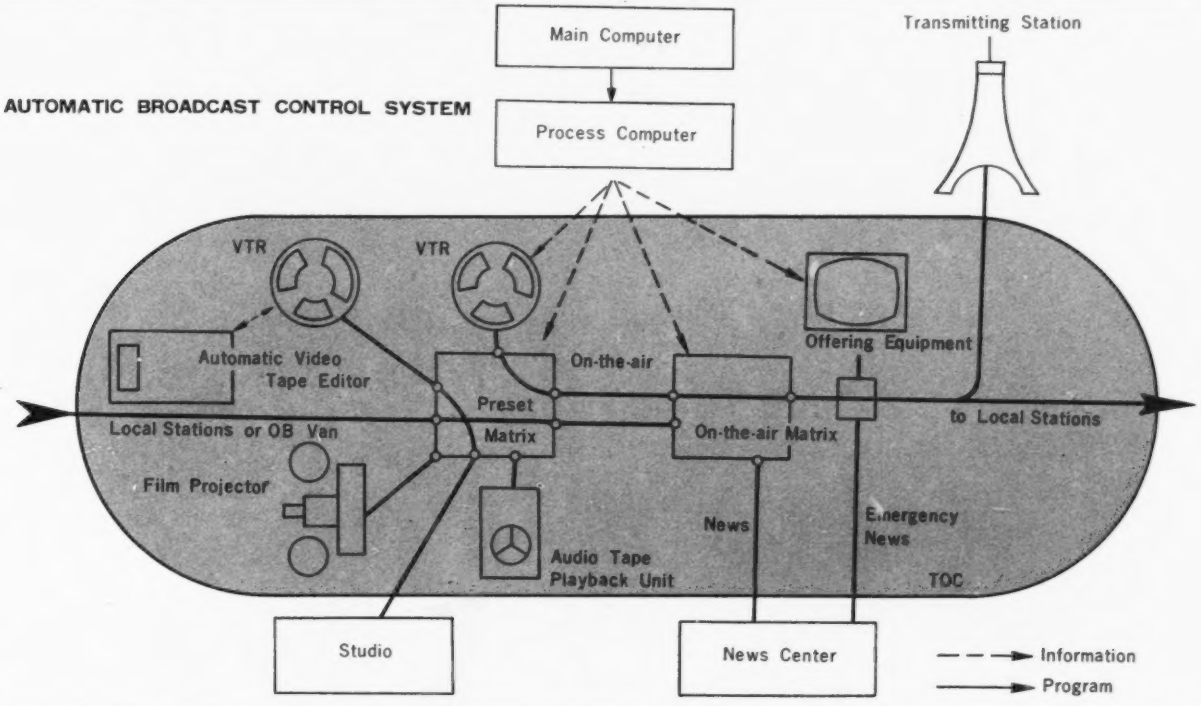
There is a video tape automatic editing room in the TOC. Unlike films, editing of video tapes is very difficult. This work has been made as easy as film editing and recording of cuts in dramas has been made possible by means of this video tape automatic editor. The device consists of two sets of standard VTRs, a simplified VTR for recording and editing, an editing table, an address signal generator, an electronic computer, and a magnetic memory device.

At the time of recording, recordings are made both at the standard VTR and the simplified VTR for editing. At this time the respective address signals are recorded in the cue track. Then at the time of editing, the editing VTR reproduces in slow-motion or still pictures. And when the button is pressed on the editing table at the beginning and the end of each cut, the respective address signals are recorded on the memory drum.

Furthermore, the two sets of standard VTRs for reproduction and dubbing are automatically operated by the address signals recorded on the memory device, and the final tape exactly arranged as the program scripts are produced from the original tape recorded at random order.

The editing room can edit four programs simultaneously and automatically dub two progroms in parallel.

AUTOMATIC BROADCAST CONTROL SYSTEM



NEWS CENTER

NHK's news has been broadcast from the highly automated News Center since August 1968. The News Center constitutes a part of NHK-TOPICS instituted for modernization of operations. Here computers and other electronic techniques are used for covering, editing and presenting news.

Essential features of this system include:

1. Transmission of news, which had previously required many personnel, has been automated.
2. For back-and-forth contacts and instructions among the coverage, editing and transmitting staffs, electronic techniques using ITV, facsimile, etc., have been adopted.
3. Gathering of news materials, delivery of scripts and transmission of news are now done by means of machines and equipment.
4. The studio, editing room and transmitting equipment have been concentrated in a single area so that news can be transmitted directly from the editing room.

As a result of such broad automation and rationalization, the staff in charge has been liberated from troublesome work of preparation for program production.

Also, as the production staff becomes adapted to the new system, complex procedures up to the transmission have been simplified and the energy formerly required for the work has been transferred to the work of improving the contents of news and of conceiving new ideas for program production and presentation.

The most important parts of this automated system include the resources random selector and the order arrangement control and display desk built around the control logic equipment unit comprising more than 4,000 integrated circuits.

Following is a description of the operation of the automated system: the desk selects the collected materials and arranges the titles of news items, using the order arrangement control and display desk.

Sub-control room in the News Center

When the titles of news items to be broadcast are written down and set to the allotted time scale, the lap time and total time are automatically indicated. The news items and the time are also shown on ITV monitors placed in various parts of the News Center.

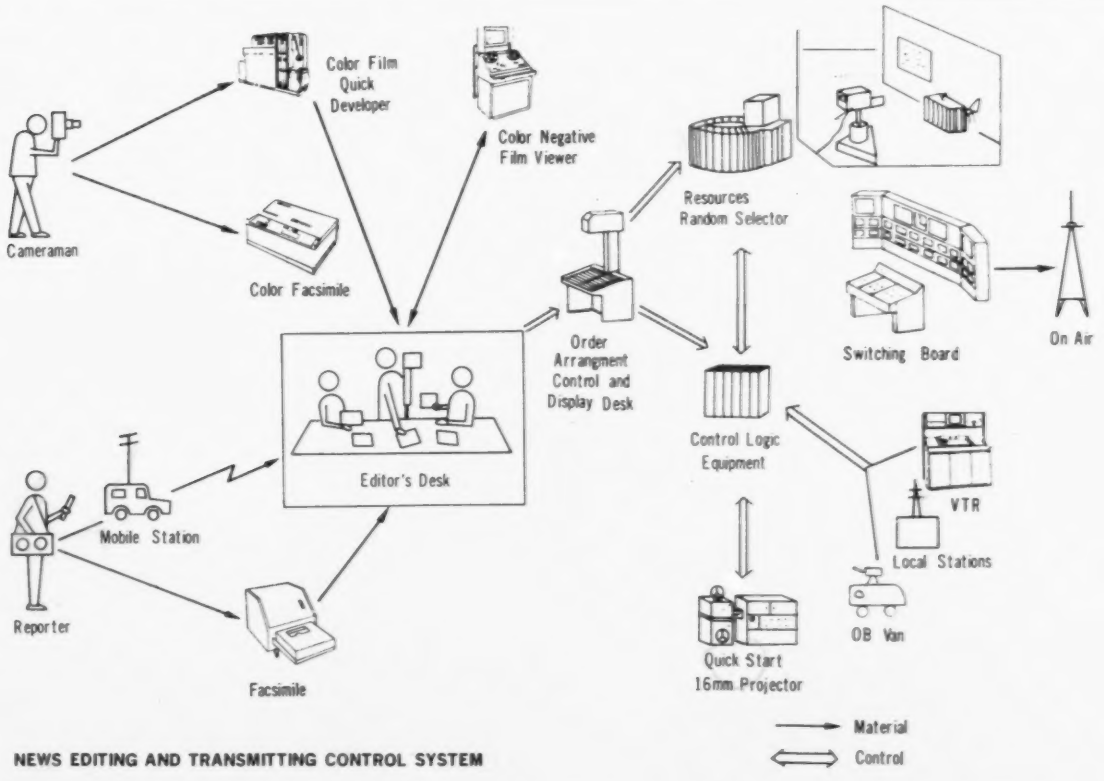
The news order thus set transmitted to the resources random selector through the electronic brain of the control logic equipment.

The producer arranges sign cards indicating instructions for production, such as the film, live studio camera, video tape recorder, etc., according to the production plan, and have them preset in the resources random selector.

As the instructions on the sign cards are read off by the resources random selector beforehand, the producer merely presses a button to switch among the studio live camera, quick starting film projector, video tape recorder, transmission from a local station, or a satellite.

In case a change in the order of items is desired, changing of the order of item indication plastic plates on the order arrangement control and display desk notifies the resources random selector of it. This allows even an emergency change of order without any mistakes or confusion.

In addition, the News Center is provided with a weather forecasting system directly linked to the Meteorological Agency and a device called the baseball system. With these devices, the latest information from the Meteorological Observatory and baseball field can be displayed instantly even during the on-air time.



NEWS EDITING AND TRANSMITTING CONTROL SYSTEM

Musical show under production in Studio 101

TV Studios

The Broadcasting Center contains 20 television and 24 radio studios while the Headquarters Building has 7 television and 11 radio studios. In addition, each regional headquarters and local stations is provided with studios for program production. When these are included, NHK's studios throughout Japan total 114 television, 120 radio and 6 TV-radio studios. Besides the above, film-shooting, dubbing, electronic music and sound effect studios are provided. NHK started rendering all General TV Service programs in color in autumn of 1971. Since then, emphasis has been placed on colorcasting of local programs, and at present, work on conversion of local studios into color studios is in progress.

CT101

CT101 is NHK's largest studio provided with the latest equipment. This studio is known widely among the viewers as a popular program goes by this name. CT101 has 1,197 square meters (47.85 × 25.58 m) in total floor space and its ceiling is 15.4 meters high. The lighting fixtures are singly suspended and remotely controlled. The studio allows use of a maximum of five cameras, and the camera crane, five meters high, is remotely controlled from the dolly. As special equipment includes a processing screen 7.5 meters high and 16 meters long and a slide projector using a 5 kW xenon lamp.

BROADCASTING EQUIPMENT

NHK's broadcasting hours now total 91.5 hours a day, including programs on the General and Educational TV Services, Radio First and Second Networks and the FM Service. With all the programs on the General TV Service rendered into color as of October 1971, colorcasts including those on the Educational TV Service, total an average of 22 hours and 32 minutes a day. While constant efforts are being exerted towards providing the audience with programs receivable under the best possible conditions, NHK also promotes technical improvements aimed at qualitative elevation of program production.

Cameras

The majority of NHK's color cameras now in use comprise the 3P type utilizing plumbicon pickup tubes. In the studios 1.2-inch 3P cameras are predominant, but for field pickup work requiring greater mobility, more compact and lightweight 1-inch 3P cameras are principally used. In addition, SEC cameras, which enable higher performance in night-time coverage work, are utilized.

Research in color cameras is actively undertaken principally at the Technical Research Laboratories. Remote-control system color cameras are used for weather forecasts and educational programs. Some are used in parallel with manned cameras. In addition, NHK also utilizes helicopter-mounted cameras remotely controlled from ground and developed the CCU-less cameras (CCU is self-contained in the camera) for relay purposes.

Sound Equipment

A typical sound technique available at NHK is the production of electronic music. Electronic music produced in NHK's studio is performed at various exhibitions in Japan or entered in television and radio contests held in various parts of the world. Audio devices developed at NHK include a recorder trouble detector and a multiple voice recording device for improving the quality of recordings while promoting rationalization of everyday work, and an improved version of a microphone mixing device.

Lighting Equipment

Lighting equipment is being improved from time to time along with the increasing number of color programs. As Studio CT101 is used for producing exclusively musical and variety programs, three filters are mounted on the spotlight. On the horizontal lights, red, green and blue glass filters are mounted at all times, and color changes are executed by remote control. For the control units, SCR and crossbar switches are used for facilitating scene changes.

Outside Broadcasting Equipment

Durability, stability and mobility are required of relay equipment used for various coverage activities centered on news gathering and sports relays. NHK actively endeavors to improve the equipment and materials in order to meet such requirments. For instance, sophisticated relay equipment was made available during the coverage of the XIth Winter Olympics held in Sapporo in February 1972, making it possible to transmit Olympic events to all parts of the world.

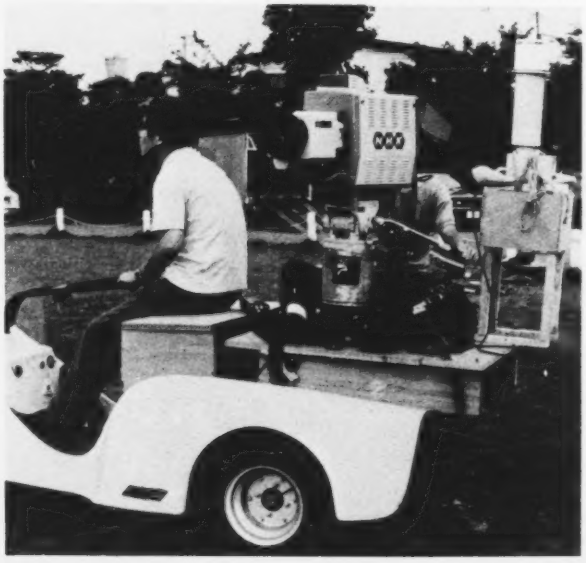
In addition, relay vans are being made more compact and more mobile. The field pickup cars are also being improved both in equipment and vehicle performance in order to facilitate coverage at disaster areas or mountainous terrain as well as to secure appropriate relay points. Also, in line with diversification of production techniques, handy cameras and CCU-less cameras are actively used, resulting in production of more colorful relayed scenes hitherto unavailable with fixed cameras alone.

TV Standard Converter

TV broadcasting has been internationalized as a result of the completion of satellite relay networks. Nevertheless, differences in the color television standards between Japan and European nations have been rendering program exchange some what difficult. NHK, therefore, developed a standard system converter to facilitate satellite relays of programs among various countries. This device has made possible the adjustment of differences between the NTSC, on the one hand, and the PAL and SECAM systems, on the other. Also, montage synthesis of foreign pictures and Japanese pictures is possible, since the device is capable of generator locking.

One of these improved devices is now installed at the Yamaguchi Earth Station, which serves as the gateway to satellite transmissions between Japan and Europe.

CCU-less Color Camera



TRANSMITTING ENGINEERING

NHK, as of January 1, 1973, operated 3,950 transmitting stations, including 1,631 on the General TV Service, 1,614 on the Educational TV Service, 173 on the First Radio Network, 144 on the Second Radio Network and 388 on the FM Service. Besides the above, experimental UHF stations transmitting programs are located in Tokyo and Osaka. Despite the large number of transmitting stations, the coverage has not yet attained 100% because of a number of isolated mountainous areas found in Japan. NHK, therefore, is endeavoring to relieve these areas of difficult reception through establishment of rebroadcasting stations and community antenna facilities.

In order to reinforce its local services, NHK established local TV and FM stations in each prefectural capital in the Tokyo, Osaka and Nagoya areas, for instance, to replace stations that have been covering several prefectures. All local UHF stations in Osaka and Nagoya areas will be built by the end of fiscal 1972, and an FM station in each prefectual capital throughout country was completed in August 1971.

Meanwhile, automation systems and unattended operation systems of broadcasting equipment have also been expedited since 1958. In particular, since many of the television transmitting stations are lacated on mountain tops and are not easily accessible, all of them, including 50 kW stations, have been provided with automated equipment requiring no attendance. For (AM) radio services all the transmitting stations, excluding the four attended ones, have been rendered into automated, unattended types. Included among them are such high-power stations as the 500 kW Akita Station established in 1971 and the 500 kW Kumamoto Station established in 1972.

Reliability of equipment poses important problems in automation and unattended operation. In this connection, NHK has been endeavoring to improve the reliability of equipment on the basis of the development of new techniques. Transistorization and use of IC (integrated circuits) have also been actively promoted. Translation using IC's may be cosidered the results of such efforts.

Compact Transmitter Utilizing IC's

Two television rebroadcasting stations, which opened for service in March 1969, are provided with the world's first compact transmitters using integrated circuits. The transmitting and receiving units are only 3.5 cm wide, 16.5 cm high, and 18 cm deep (the UHF transmitting unit is only 12.5 cm wide). The UHF unit contains 10 integrated circuits made of 6 types of components, while the VHF unit contains 18 circuits made of 15 types of components. The UHF units have an output of 1 W, 3 W, and 10 W and the VHF unit, 100 mW.

Transmitting stations located where no commercial power is available are provided with home power generators using hydrogine. At present, two such stations are in operation.

High-Power AM Transmitters

NHK also endeavors to work out means of preventing interference by signals originating in overseas countries and of improving technology related to AM transmitters. NHK constructed a 500 kW AM transmitter—Japan's highest output—in Akita Prefecture in 1971, and in Kumamoto Prefecture in 1972.

High-Power UHF Experimental Station

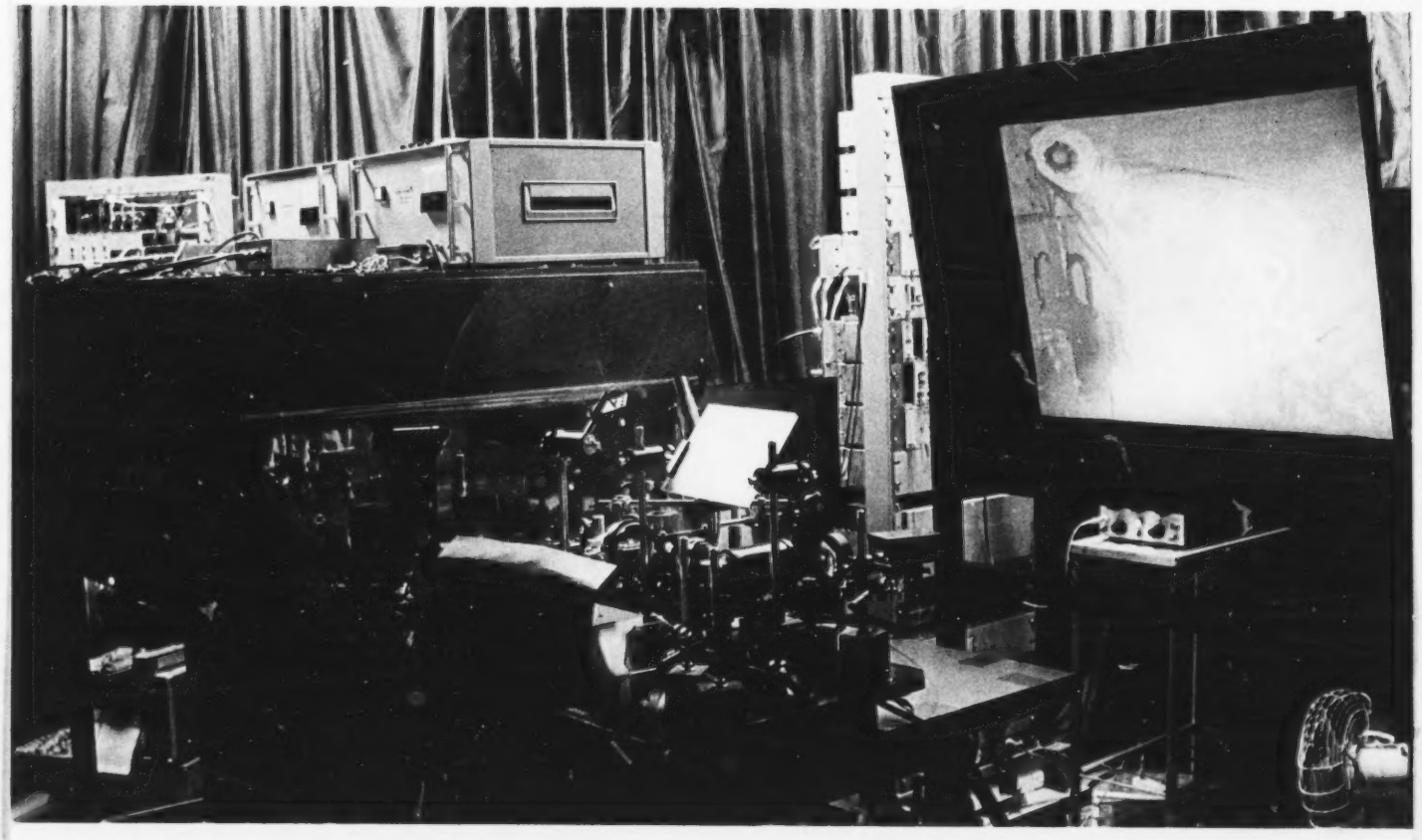
NHK commenced experimental UHF services in Tokyo and Osaka on January 4, 1971. UHF broadcasting has been implemental where VHF signals fail to reach, such as mountainous areas and isolated islands, and where VHF signals interfere with each other. However, the experimental services were started for the purpose of assisting in the popularization of UHF TV receivers, and of studying the effect of high-rise buildings on the propagation of UHF signals. The Tokyo Station operates on an output of 10 kW, while the Osaka Station operates on 50 kW.

RESEARCH AND INVESTIGATION

OUTLINE

Among mass-communications media none has achieved more rapid development and is more promising with respect to further development in the future than broadcasting. Therefore, efforts are concentrated on grasping the essential nature of the mass-media using radio waves and the real state of broadcasting culture. This offers a challenge to the engineering field that harbors unlimited possibilities and promise for future progress. In answer to the requirement for transmitting high-quality programs at the highest possible technical level, NHK soberly but systematically undertakes research and investigation in the above two fields. The results achieved in such research and investigation, moreover, are not confined exclusively for its own benefit but are made available to commercial broadcasters, electric equipment makers and public agencies so as to contribute to the development not only of Japan's broadcasting but also that of the entire world.

Research on laser display



TECHNICAL RESEARCH

Since its establishment in 1930, NHK Technical Research Laboratories, has made a number of valuable contributions to broadcasting engineering in Japan. At present, NHK maintains two laboratories, namely, the Technical Research Laboratories and the Broadcast Science Research Laboratories, which undertake active research work while keeping in close contact with each other.

Technical Research Laboratories

The Technical Research Laboratories undertakes technical studies of all aspects of broadcasting from program production to reception at the homes of subscribers. At the same timĕ, it is actively engaged in basic studies of engineering for future broadcasting.

Principal subjects under study at the Laboratories include the following: Japan's first experimental SHF station in the 12 GHz band was established at the Laboratories site in 1971. At present, this station beams experimental signals in FM (200 W output) and AM (120 W) with the object of probing into possibility of SHF utilization in future broadcasting. In addition, studies in new media, such as still picture broadcasting, television facsimile, higher quality television and four-channel stereo broadcasting, in color cameras, audio devices and in architectural acoustics, which are directly related to program production, are being undertaken. In 1972, high-performance pickup tubes "SATICON" with a diameter of 16 mm and 25 mm using a glass semiconductor on a photoelectric conversion surface, and a CCU-less color camera provided with a color view finder were developed.

Basic studies included television reception with discharge type display panel using neon gas, wide screen television utilizing laser rays, a sound and video recording system by thermo-magnetic recording, holography and a data processing system using electronic computers.

Development of parts of various types needed for promoting such studies, and basic study of the nature of radio waves are also conducted in parallel. Examples are investigation and study of a system suitable for satellite broadcasting and successful use of integrated circuits for capacitor memory devices.

FM facsimile

"SATICON" and prototype of small size color camera

Broadcasting Science Research Laboratories
The Laboratories undertakes study of audio-visual science and solid state properties with a view to developing new broadcasting systems and opening up new technical fields. In this work, not only NHK's own researchers but also guest researchers invited from outside are employed.

The principal research theme is the audio-visual system. In this field, investigations are made into the visual and auditory senses, and knowledge obtained therefrom is utilized to enhance the study of the audio-visual science useful to the quality improvement of existing broadcasting and development of future broadcasting. And on the basis of such studies, models of nervous systems and of audio-visual systems using electronic circuits have been made for studying future data processing systems. In 1970, electronic models of the eye and the ear were completed. In addition, two new characteristics of the visual system were confirmed.

In the field of solid state property research, such themes as optical properties of powerfully magnetic substances, subjects related to photoelectric conversion and crystalline properties, are studied.

With regard to the study of crystalline properties, a "crystal flaw direct viewing device" has been developed, the first of its kind in the world. This device uses an X-ray generating unit and an X-ray vidicon camera to display the lattice defect inside a crystal on the cathode-ray tube screen for direct viewing. This achievement was taken up as a research theme by a government agency, and its comprehensive system was completed in 1972.

RADIO AND TV CULTURE RESEARCH

In order to improve broadcasting programs, it is essential that efforts be made to properly reflect public opinion at all time in the compilation of broadcasting programs. For this purpose, research and study on various phases of broadcasting are most indespensable for the development of broadcasting. In this field, NHK has its Radio and Television Culture Research Institute and Public Opinion Research Institute which are contributing to broadcasting progress through research.

The two institutes started out in 1946 as the "Broadcast Culture Research Institute" and have conducted various research and investigation related to broadcasting. In 1965, the institute was divided into the aforementioned two organizations. Following is a brief outline of the work conducted by both.

Research in Broadcast Programs
In this field, studies on the evaluation of program contents, the principle of educational and cultural program production, children's life and the role of television, television in relation to young people's thinking patterns, and utilization of school broadcasts are undertaken continuingly.

In particular, the utilization and effect of school broadcasts and correspondence education courses are investigated, and the results are used not only as data for program compilation and production but also as basic data on research in educational methods and the effects of education.

Research and Studies of Broadcast Language
NHK is always striving through its broadcasts to popularize an accurate Japanese spoken language among our people. For this purpose, NHK has established the Broadcast Language Commitee to make studies of the broadcast language centering around oral language, orthography for TV and technical terms.

Research of Broadcasting Affairs
For the progress of our broadcasting world, it is necessary to grasp an accurate picture of broadcasting both at home and abroad. For this purpose, NHK exchanges relevant materials and information with broadcasting organizations in other countries, as well as with research institutes, foreign diplomatic missions in Japan, and the like, so as to investigate the broadcasting system and programs now prevailing both in Japan and in foreign countries to utilize such findings for cultivating new fields of broadcasts, to improve its own programs, and also to rationalize its management.

Studies of Broadcasting Science
Since broadcasting has become an indispensable part of the people's life at present and its influence has become very significant, it is very important in view of its social impact to tackle scientifically the inherent nature of broadcasting and its social functions and to bring it under systematic study. For this purpose, NHK, in collaboration with various universities and research institutes, carries out an exhaustive analytical study of the science of broadcasting.

Compilation of the History of Broadcasting
NHK has already published, in Japanese, "The History of Broadcasting in Japan", compiled in three volumes. An English version has also been published. The "NHK Yearbook" (in English, "NHK Handbook") containing accurate records of its business operations has also been published.

Broadcasting Museum
The Broadcast Museum was established in 1956 in commemoration of the 30th anniversary of broadcasting in this country. It was located in the JOAK station building, where the first radio broadcasts were begun in 1925. However, as the building became outdated, a new one was constructed on the same site in 1968. The exhibit room, with an area of about 300 square meters, contains radio equipment made both in Japan and abroad, broadcasting scripts and photographs. These are exhibited in chronological order to show the progress of broadcasting since its inception. Also available are exhibits showing the principles of radio and television techniques and an experimental model studio that can be operated by visitors.

Public Opinion Research Institute
The Public Opinion Research Institute undertakes various public opinion surveys on broadcasting, the results of which are utilized as data for programming. At the end of 1970, results of the "How-Do-People-Spend-their-Time Survey" were announced. These contain details of the people's time budgeting during a 24-hour day. NHK is one of the very few cases of a single broadcasting organization undertaking such large-scale nation-wide surveys. The survey, therefore, is a focus of attention not only by other broadcasting organizations but also by government agencies and private enterprises.

The principal tasks of the Public Opinion Survey Institute comprise the following three:

1. Public opinion surveys on programs. Nation-wide program rating surveys are undertaken several times a year by the personal interview method. In addition, surveys of opinions regarding broadcasts are also undertaken.
2. Surveys related to public opinion on politics, economy and social affairs. Up to now, surveys on elections, home life, education, occupation, etc. have been undertaken.
3. The how-do-people-spend-their-time survey. In this survey, time spent in a day for certain behavior is investigated. The survey has been conducted every five years since 1960.

AUDIENCE SERVICES

Technical personnel checking TV reception at construction site

Public Relations

Being a public broadcasting organization, NHK must closely heed the requirements of the audience in its implementation of management affairs and programing and also must obtain audience understanding of its management policies through public relations.

Public relations through broadcasting includes the "Audience and NHK", which is a session held once a month to listen to the opinions of the audience invited to the studio. This session is attended by responsible officers of pertinent departments as well as by the President of NHK. Besides broadcasting, opportunities for contact with the audience are provided as frequently as possible. The audience-NHK informal talks, which was introduced in 1961, is one of such opportunities. In fact, meetings of this nature have been held 5,500 times with total attendance of nearly 100,000 up to April 1972. Public relations through other mass-media, such as newspapers and magazines, is also undertaken actively. All these are intended to help the audience to arrive at correct understanding of NHK and to introduce NHK's programs.

Audience Services

NHK must secure receiver's fees, the financial basis of business operations, in addition to providing the audience with programs of good quality. For this purpose it is necessary to create a better

receiving environment so that the audience may enjoy high-quality sound and pictures. In the circumstances, not only the receiver's fee division but also reception improvement division and technical division are provided for the General Administration of Audience Services in order to undertake active audience services. Also, to cope with enquiries and complaints of individual viewers, an NHK Consultant Room has been set up at every NHK station in the country. The voices of the audience collected at these consultant rooms are used as a reference in improving the conduct of everyday affairs.

Reception Guidance

NHK actively undertakes improvement of receiving techniques and provides advice on reception so that the audiences may enjoy programs of good picture and sound quality. In April 1971, the "TV Reception Improvement Committee" was established jointly among NHK, the Electronic Industries Association of Japan and the Association of National Electric Appliance Dealers for the purpose of enhancing the efficiency of such activities. It was thus that an organization of national scale was set up under collaboration of the broadcaster, makers and retail dealers for providing guidance in receiving techniques and improving reception.

Since 1969, NHK has been adopting the community antenna television system for areas of poor reception with less than 200 households. This is a facility jointly built and operated by NHK and the local subscribers. Such facilities totaled about 3,100 as of November 30, 1972, serving a total of 230,000 households. NHK also has been endeavoring to develop and improve various devices for community antenna receiving facilities, and some of the achievements include trunk amplifiers of wideband type and other devices with simplified maintenance, checking, stringing and higher stability.

Lately, areas of poor reception are increasing in the urban areas. This is attributable to tall buildings, expressways and the like. In order to meet the situation, NHK, while providing guidance in installation of community antennas for an entire building, undertakes various public relations services to enhance understanding of the general public regarding correct methods of receiving programs. Furthermore, NHK undertakes investigations into receiving conditions at the request of the audience. When construction of any tall building likely to obstruct reception is planned, NHK sends engineers to the site to study the situation and provide pertinent guidance. For the purpose of providing such services, NHK has assigned a total of 69 receiving service cars to 62 broadcasting stations.

OVERSEAS COOPERATION

NHK is cooperating with overseas broadcasting stations to keep up with internationalization of broadcasting. It introduces foreign countries and events to its domestic audience, and also broadcasts Japanese news and topics to overseas nations. NHK also participates in international broadcasting organizations, extends technical guidance and sponsors other activities such as the "Japan Prize" contest.

Cooperation with Overseas Broadcasting Organizations

NHK is active as a member of various international broadcasting organizations. Through mutual cooperation it endeavors to promote an interchange of broadcasting culture.

NHK is an associate member of the European Broadcasting Union (EBU), the largest international broadcasting organization. It exchanges information, data and programs with the EBU, and also attends many of its meetings.

NHK became a full member of the Asian Broadcasting Union (ABU) when it was organized in 1964, and had promoted its establishment ever since 1957. The president of NHK is currently the president of the ABU.

NHK has concluded various agreements with broadcasting organizations in all parts of the world to exchange programs and cooperate in various undertakings. It currently has agreements with broadcasting stations in Spain, the United Arab Republic, Argentina, Rumania, the Soviet Union, Hungary and Poland.

Interest in television has been greatly stimulated in Southeast Asian and Latin American countries. At the same time, utilization of satellite transmissions has become active and frequent. And with rising hopes for rational utilization of satellites as the turning point, establishment of a coordinating center for satellite utilization materialized at the ABU General Assembly held in Istanbul in 1970. The coordinating center is now established provisionally at NHK.

Technical Assistance

Interest in television has been rising recently in developing countries in Southeast Asia and Central and South America. In such countries where construction of television networks has been launched, NHK is extending technical assistance.

Requests for technical assistance have been forwarded to NHK through the Japanese Government, and NHK has responded by sending specialists to developing countries, and also by accepting trainees for study in Japan.

So far NHK has sent investigation teams and helped in drawing up blueprints for TV networks in such countries as Cambodia, Thailand and Uganda. It has also sent specialists to various countries to train engineers in the operation and maintenance of broadcasting equipment. Such countries include Malaysia, Singapore, Pakistan, Indonesia, Colombia, El Salvador, and Nigeria.

A total of 569 trainees from 38 countries have been accepted for training in Japan since 1961. The trainees came from Thailand, China, the Philippines, South Korea, India, Ghana, Bolivia and other countries. NHK's training program, which ranges from basic studies to program production technology and broadcasting technology, has proved extremely beneficial to the overseas students.

Among NHK's acclaimed technologies are the TOPICS (Total On-line Program and Information Control System). This has attracted the attention of overseas broadcasting organizations.

Program Exchange

NHK exchanges radio and television programs with stations in many countries to promote mutual understanding and also to add variety to its own domestic programs.

The Program Exchange Service of NHK edits domestic and overseas broadcast programs of its own to be sent to broadcasting stations abroad. These programs are being utilized by many countries. Requests from foreign broadcasting stations for NHK's programs including those winning international awards, such as the Italia Prize, or those programs which have been entered in various international contests, are received by NHK in ever-increasing numbers every year.

For educational programs, NHK Educational Films Library has been organized and is available for developing nations.

At present, NHK exchanges radio programs with 140 broadcasting organizations in 70 countries and television programs with 50 broadcasting organizations in 40 countries.

"JAPAN PRIZE" CONTEST

On the occasion of the 40th anniversary of radio broadcasting in Japan and of the Second World Conference of Broadcasting Organizations on Sound and Television School Broadcasting held in Tokyo in 1964, NHK established the "Japan Prize" International Educational Program Contest aimed at improvement of educational programs. The first contest was held in 1965. This is the world's only annual contest for the purpose of improving educational programs.

For the present contest the following categories are established for entries in sound broadcasting and television:

1. School Broadcasting Program directed for Primary Education and Educational Programs intended for Kindergartens and Nursery schools.
2. School Broadcasting Program directed for Secondary Education.
3. Educational Program designed for Adults (including programs designed for higher professional and university education)

The "Japan Prize" Contest is open to all broadcasting organizations, or groups of such organizations, which are authorized to operate a broadcasting service by the competent authority in a country or territory that is a member or associate member of the International Telecommunication Union (I.T.U.).

"Japan Prize" Contest Participants:

		Place	Country	Organi-zation	Program
1st	1965	Tokyo	46	70	185
2nd	1966	Osaka	54	84	161
3rd	1967	Nagoya	61	86	202
4th	1968	Tokyo	53	75	167
5th	1969	Hiroshima	56	87	178
6th	1970	Sendai	55	84	188
7th	1971	Tokyo	59	82	176
8th	1972	Sapporo	52	82	158

Entries in this Contest are judged by a panel of 10 members selected by NHK from the regions of the participating countries, and by an additional four members chosen from among scholars and experienced persons.

Prize awarding ceremony of 8th Japan Prize International Educational Program Contest

The Japan Prize is awarded to programs that possess high educational value, and that prove the important role and potentialities of broadcasting in the field of education. There are two Japan Prizes. One goes to the best sound broadcasting program and one to the best television program.

High merit prizes are awarded to the two best programs, excluding the Japan Prizes, in both the radio and TV sections. The radio prizes are the Minister of Education Prize and Prize of the Governor or Mayor of the locality where the Contest is held; the TV prizes are the Minister of Posts and Telecommunications Prize, the Abe Prize, and UNICEF Prize.

Special Prizes are also awarded, three for radio, and three for TV programs. They are awarded after considering the economic-sociological conditions, and the special program-production circumstances of the broadcasting organizations. They are given to programs that show evidence of hard effort, and possess high educational merit.

Serious interest in the "Japan Prize" contest is particularly evident among the developing nations, where radio and television programs are being widely utilized to disseminate education. It is hoped that this annual contest will serve to improve educational programs in many countries, and contribute to better international understanding and cooperation.

Leading Personalities :

Board of Governors :	Sajuro Ito, Tetsuro Furugaki Shirohichi Kimura, Toshizo Suzuki Mitsuru Ohta, Saburo Fujita Mikio Sakurauchi, Zenji Akabane Zenpuku Shinzato, Shinichiro Kudo Taki Fujita, Shinichi Hase, Yoshiro Ito
President :	Yoshinori Maeda
Vice-President :	Kichiro Ono
General Managing Directors :	Katsuki Fujishima, Shigetoshi Takenaka Hiroyoshi Sano, Saburo Omura Hayao Matsuura, Kazuo Fujinei Tadao Nomura
Managing Directors :	Yukinori Yoshida, Tomokazu Sakamoto Kiyoshi Saito
Auditors :	Ichiro Hatakeyama, Ichiro Nakayama Takeo Suzuki

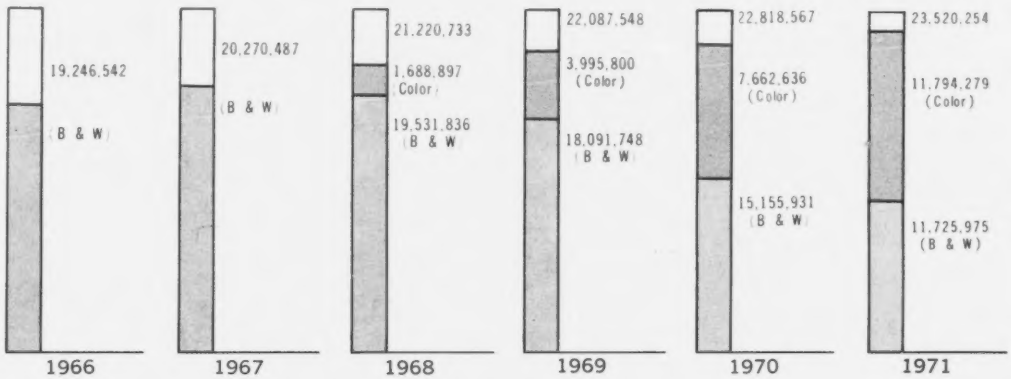
Number of NHK Stations and Air Time (as of January 1, 1973)

	Station	Air Time per Day
Radio		
First Network	173	19 h 00 m
Second Network	144	18 h 30 m
FM Network	388	18 h 00 m
Television		
General Network	1,631 (1,100)	18 h 00 m
Educational Network	1,614 (1,089)	18 h 00 m
Note : Number of UHF stations given in parentheses		
(Color Broadcasting Hours)		
General Network		18 h 00 m
Educational Network		4 h 32 m
Overseas Broadcasts		
18 transmissions in 23 languages, 37 hours daily		

Number of Subscribers (Households) (as of November 31, 1972)

Black and White TV	10,188,513
Color TV	13,908,832
Total	24,097,345

Distribution of Number of TV Subscribers



Analysis of Program Contents of NHK TV, AM and FM Radio in a Week, 1972

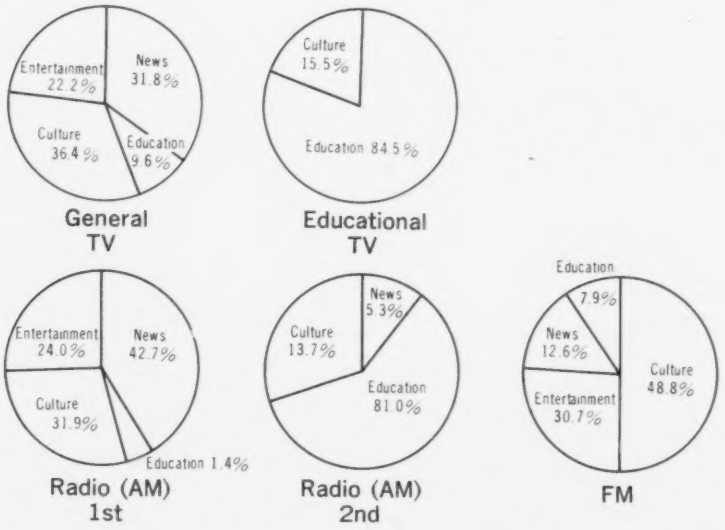
	General TV	Educational TV	Radio (AM) 1st	Radio (AM) 2nd	FM
News and News Commentary	39:59		56:49	6:55	15:50
Educational	12:07	106:30	1:55	104:50	10:00
Cultural	45:52	19:30	42:25	17:45	61:30
Entertainment	28:02		31:51		38:40
Total (hours)	126:00	126:00	133:00	129:30	126:00

Number of Regular Broadcast Programs of NHK TV, AM and FM Radio in a Week, 1972

	General TV	Educational TV	Radio (AM) 1st	Radio (AM) 2nd	FM
Broadcast Programs	349 (159)	156	427 (271)	246	156 (54)
Repeat Programs	61	112	26	166	12
Total	410 (159)	268	453 (271)	412	168 (54)

Note: Number in parentheses shows that of news and information programs

Percentage Distribution of Radio and TV Programs Classified by Types in a Week, 1972



Analysis of Technical Facilities of NHK (as of April 1, 1972)

Studio

	Radio	TV	For use both for Radio & TV
Tokyo	35	27	
Local	85	87	6
Total	120	114	6

TV Camera, OB Van, VTR

	Camera (B & W)	Camera (Color)	OB Van (B & W)	OB Van (Color)	VTR
Tokyo	34	89	3	8	65
Local	75	179	33	19	124
Total	109	268	36	27	189

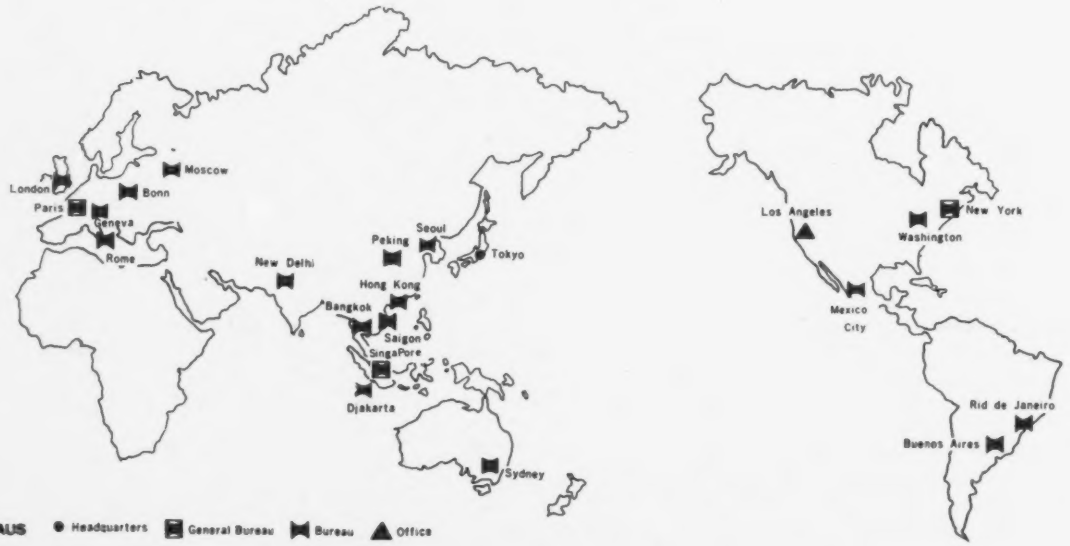
Analysis of Station Power of NHK TV and Radio (as of April 1, 1972)

TV Station Power		50kW	10kW	5kW	3kW	1kW	500W	300W	250W	90~100W	66~76W	50~65W	1~40W	50~300mW	Grand Total
Sub. Total	General	1	10	6	9	25	4	7	12	96	12	3	1200	61	1446
	Educational	1	9	6	9	22	4	7	12	96	12	3	1194	61	1436

Radio Station Power		500kW	300kW	100kW	10kW	5kW	3kW	1kW	500W	250W	100W	50W	20~30W	10W	1~3W	Grand Total
Sub. Total	R 1			4	14	13	2	28	2		79	26	2			170
	R 2	1	2	2	13	3		33	6		64	17				141
	FM				3	5	4	30	12	11	100	8	14	115	49	351

OVERSEAS BUREAUS

NHK General Bureau for Asia	Rm. 601, Shaw House, Orchard Road, Singapore 9,	SINGAPORE
NHK Bangkok Bureau	7 Soi Buna Sarn 28, Sukhumvidh Road, Bangkapi, Bangkok,	THAILAND
NHK New Delhi Bureau	C-411, Defence Colony, New Delhi 24,	INDIA
NHK Hong Kong Bureau	Botanic Terrace, Block B, Flat 3C, 3-7 Conduit Road,	HONG KONG
NHK Djakarta Bureau	DJL Tasikmalaja 11-A, Djakarta, P.O. Box 245/DKT,	INDONESIA
NHK Peking Bureau	C'33, Second Kungyu, Sanlitun Chayangmen-wai, Peking,	PEOPLE'S REPUBLIC OF CHINA
NHK Saigon Bureau	23 Han Thuyen, P.O. Box 1285, Saigon	REPUBLIC OF SOUTH VIETNAM
NHK Seoul Bureau	Rm. 505, New Korea Hotel, I-ka, Ulchi-Ro, Seoul,	REPUBLIC OF KOREA
NHK Sydney Bureau	Harrowgate House Rm. 72, 155 Castlereath Street, Sydney N.S.W.,	AUSTRALIA
NHK General Bureau for Europe	10 rue Cardin, Paris 16e,	FRANCE
NHK London Bureau	43 Shoe Lane, London E.C. 4,	ENGLAND
NHK Moscow Bureau	Sadovo Samochotinaya 12/24 Flat 13, Moscow,	U.S.S.R.
NHK Rome Bureau	c/o RAI, via del Babuino 9, Rome,	ITALY
NHK Bonn Bureau	53 Bonn An del Heuss-Allee, 2-10 Presshaus 1, Allianzplatz,	FEDERAL REPUBLIC OF GERMANY
NHK Geneva Bureau	19 Ave Edmond Voucher 1211, Geneva,	SWITZERLAND
NHK Genaral Bureau for America	Rm. 1702, 850 Third Avenue, New York, N.Y. 10022,	U.S.A.
NHK Washington Bureau	Rm. 935, National Press Bldg., Washington, D.C., 20004,	U.S.A.
NHK Los Angeles Office	812, South Orange Drive, Los Angeles, 90036, California,	U.S.A.
NHK Rio de Janeiro Bureau	Rua General Glicerio 364, Apt. 704, Laranjeiras, Rio de Janeiro,	BRAZIL
NHK Buenos Aires Bureau	Pacheco de Melo 1963, 10 Piso DTO B, Buenos Aires,	ARGENTINA
NHK Mexico Bureau	Santa Margarita 311, Colonia del Valle, Sur Mexico 12D.F.,	MEXICO



BRIEF HISTORY OF NHK

Mar. 1925 Initial radio waves were emitted in Japan (March 22 has since 1934 been set as Broadcast Day).
Oct. 1925 Japan's first outside broadcast (on-the-spot coverage of the parade).
Aug. 1926 NIPPON HOSO KYOKAI or Japan Broadcasting Corporation, a corporate juridical person, was established.
Aug. 1927 First on-the-spot broadcast of a baseball match.
Nov. 1928 First nation-wide relay broadcast (on-the-spot broadcasting of the Enthronement Ceremony of the Emperor).
Feb. 1930 First successful long-distance short wave relay broadcast from London.
Jun. 1930 NHK Technical Research Laboratories was established, research on TV began.
Dec. 1930 First Japan-U.S. short wave exchange of Christmas programs.
Apr. 1931 The Second Radio Network was put into operation.
Jul. 1932 Deferred broadcasts of highlights of the 10th Olympic Games were relayed from Los Angeles.
Nov. 1932 Japan's first recorded broadcast (speech of Ambassador Sato) beamed from Geneva.
Apr. 1935 Nation-wide transmission of school broadcast began.
Jun. 1935 Regular overseas broadcasts were inaugurated.
Jun. 1936 On-the-spot broadcasts of the 11th Olympic Games in Berlin were successfully carried out.
May 1939 Experimental telecast was successfully conducted by Technical Research Laboratories.
Nov. 1941 First recorded relay broadcasting of a parliamentary session.
Aug. 1945 Broadcast of the recorded decree by H.I.M. the Emperor stating the end of the Pacific War.
Jun. 1946 Radio and Television Culture Research Institute was established.
Jun. 1949 Use of magnetic tape-recorders began.
Jun. 1950 Under the Broadcast Law, the corporate juridical person, Nippon Hoso Kyokai turned to a special juridical person. Board of Governors established.
Mar. 1952 Dispatch of overseas representative to Paris. NHK succeeded in trial wireless color telecast.
Jul. 1952 On-the-spot broadcasts from the 15th Olympic Games in Helsinki.
Dec. 1952 First stereophonic broadcast using two radios.
Feb. 1953 NHK's Tokyo Television Station inaugurated regular television broadcasting in Japan.
Jun. 1953 On-the-spot broadcast of the Coronation Ceremony of Queen Elizabeth II in a tie with BBC.
Oct. 1954 First practical application of kinescope recording in a TV relay of a Kabuki drama.
Nov. 1955 First broadcast of electronic music.
Mar. 1956 Broadcast Museum opened in Radio and TV Culture Research Institute.
Nov. 1956 On-the-spot broadcast of the 16th Olympic Games in Melbourne.
Feb. 1957 Experimental short wave broadcasts to the Antarctic region started (suspended in February 1962).
Jul. 1957 First Asian Broadcasters' Conference was held in Tokyo.
Dec. 1957 Experimental FM broadcast on VHF band inaugurated in Tokyo area.
Jul. 1958 Use of video tape recorder began.
Jan. 1959 NHK inaugurated Educational TV Network in the Tokyo area.
Apr. 1959 Special broadcast of the Wedding Ceremony of H.I.H. the Crown Prince.
Nov. 1959 Dispatch of NHK's special overseas coverage teams was started.
Aug. 1960 On-the-spot radio and TV broadcasts of the 17th Olympic Games in Rome.
Sep. 1960 Regular color television broadcasts were commenced in Japan.
Jun. 1961 Central Training Institute was established.
Nov. 1962 NHK completed its TV broadcasting network across Japan.
Apr. 1963 NHK Correspondence Senior High School was opened. Construction of NHK Broadcasting Center began.
Nov. 1963 First experimental transmission by the communication satellite was conducted successfully (between Japan and U.S.A., Europe).
Apr. 1964 The 2nd International Conference of Broadcasting Organizations on Sound and TV School Broadcasting was held in Tokyo by NHK.
Oct. 1964 Broadcasting of the 18th Tokyo Olympiad.
Oct. 1965 The first period of construction of NHK Broadcasting Center was completed. NHK established "Japan Prize" International Educational Program Contest (annually). 2nd General Assembly of ABU was held in Tokyo by NHK as host organization.
Mar. 1966 Nation-wide color network completed.
Jun. 1966 1st ABU Administrative Council was held in Tokyo.
Jun. 1967 First global live TV program "Our World" was broadcast jointly by 14 nations through 4 satellites.
Jun. 1968 The 2nd period construction of NHK Broadcasting Center was completed.
Oct. 1968 Colorcast of the 19th Olympic Games in Mexico with three other broadcasting organizations. NHK-TOPICS started its operation.
Sep. 1969 First telecast of political view.
Jan. 1970 Experimental regular sound multiplex TV broadcasts.
Mar. 1970 Colorcast of EXPO '70.
Jan. 1971 Experimental UHF broadcast inaugurated in Tokyo and Osaka.
Mar. 1971 Experimental SHF broadcast inaugurated in Technical Research Laboratories.
Aug. 1971 FM station in each prefectural capital throughout the country was completed.
Oct. 1971 All General Television Service Programs were presented in color.
Feb. 1972 Broadcasting of the 11th Winter Olympic Games in Sapporo.

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